

Univ. of Michigan,  
General Library,  
Ann Arbor, Mich.

Medical Library

Treatment Problems in Diabetes  
Fundamental Personality Factors  
Cultural Medicine • Deductive Analysis

---

Medical Book News

Editorials

Contemporary Progress

Vol. 72

No. 2

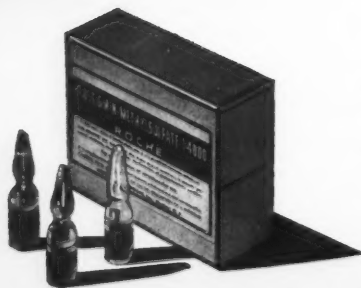
Address all Exchanges and Books for Review to 1313 Bedford Avenue, Brooklyn, N. Y.

# Skilful Surgery

## BUT...



— **POSTOPERATIVE DISTRESS** may mar the clinical picture to a discouraging degree. Abdominal distention and urinary retention, following surgery, are frequently the cause of complications necessitating troublesome procedures that are apt to retard the patient's recovery. The routine use of Prostigmin Methylsulfate\* 1:4000 provides a convenient and effective means of preventing intestinal and bladder atony, minimizing the likelihood of "gas pains" and the need for catheterization. Try Prostigmin 'Roche' for a smoother, uninterrupted convalescence. Inject 1 cc (1:4000 solution) at the time of operation. Follow with 5 similar 1-cc injections at 2-hour intervals after the operation. **HOFFMANN-LA ROCHE, INC., NUTLEY, NEW JERSEY**



\*Dimethyl-carbamic ester of m-oxyphenyl-trimethyl ammonium methylsulfate.

## PROSTIGMIN 'Roche'

## EDITORIALS

### *A Friendly Committee Gags*

**E**VEN the Committee of Physicians for the Improvement of Medical Care, Inc., cannot swallow the Wagner-Murray-Dingell bill to provide national sickness insurance.

The Committee cannot approve the bill as it stands. Its members are perturbed about the quality of service proposed in the bill, and about the economy and efficiency of operation. They think its starting coverage is too great—110,000,000 persons. They also prefer a tax-supported system, rather than a compulsory insurance levy, and believe that the National Advisory Councils set up by the proposed legislation should be given more scope. Hospital rates are thought to be too small and outpatient clinics of hospitals would be largely denuded of patients. The Committee condemns the fee for service provisions, public employees should be covered, and the practice of cooperative medicine should be encouraged. "Approval of contracts with hospitals by the Surgeon General should be contingent upon the appointment of a salaried medical staff, if only a small one, to supervise the professional work and the establishment of laboratory and other facilities. The Surgeon General should be authorized to make contracts with approved outpatient clinics for certain services."

When even the friends of such legislation are so dissatisfied with the monstrosity that has been spawned, it must—to employ a euphemism—be woefully defective.

### *A Triumph of Underworld Genius*

**D**R. Robert L. Dickinson, in his article on conception control in the *Journal of the American Medical Association* of



December 18, 1943, states that among contraceptive agents "the effervescent douche directly from the neck of the bottle of the popular cheap carbonated acidulated beverages is much used and is spermicidal."

Have we not here the answer to the eternal search for a reliable contraceptive device, meeting ideally all chemical and mechanical pos-

ulates? Nothing less than genius, plus alcoholic inspiration, hit upon such a method, probably in some sink of iniquity. It is the underworld's greatest triumph.

As Newton gazed upon the falling apple, look now upon a fizzing pop bottle and imagine the sure fate of a hapless spermatozoon cornered in a vaginal fornix by the atomic energy released like rocket bombs from the pop bottle.

Non-effervescent beverages lacking this auxiliary sex appeal will have to meet this mighty challenge.

One may now expect to run across illustrated (?) advertisements proclaiming the double usage of Gluck's Gusto Pop:

Have always in your home or love nest a supply of Gusto, the pop that can be relied upon in any social emergency, whether of the guest table or bed.

Indispensable as a beverage;  
Insurance against bedroom contretemps.

### *The Menace of Increasing Longevity*

**I**N his address at the recent commencement exercises of the University of Cincinnati College of Medicine, Dr. Roy W. Scott of the Western Reserve School of Medicine warned the new generation of physicians to keep the apparent boon of a lengthened life, for which the medical profession is responsible, from becoming a social Frankenstein. Modern medicine is filling the world with old people, which means an increased economic burden of caring for the aged and for chronic physi-

cal and mental illness among them. Scott believes that the burden may prove too heavy for the social structure.

The chief key to this new problem, it seems to us, is to keep senile individuals out of all governmental offices—judicial, legislative and executive.

### *Two Disquieting Parallels*

**W**HEN Henry James revisited the United States in 1904-5 he expressed his misgivings as to the country's future, wondering "whether the amalgams of the next generation would show reversion to the inherited characteristics of their ancestral, non-English-speaking countries." The language spoken made him especially apprehensive, for he wished that sustaining cultural forces

might dominate. "The nation must not descend to the level of the proletariat." Lyon N. Richardson, of Western Reserve University, pictures James as deploring the spectacle of the United States as a melting pot of the uncultured and less fortunate classes speaking alien tongues and degrading the English speech and language.

Besides debasement of speech and language, we think that another criterion is to be found in the social debasement which is inherent in plans for bringing medicine totally under the aegis of the State, which plans show reversion to the inherited and cultural characteristics of certain types of ancestry.

Thus run neck and neck two disquieting parallels, menacing a wholesome democracy.



### *Points on Army Malaria*

**A**PPROXIMATELY 50 per cent of those contracting malaria have only a single attack. Sometimes there are relapses in malaria, but the death rate is low, due to prompt medical attention.

### *From the War Department's Bureau of Public Relations*

**T**HE average American citizen today is not particularly aware of the danger of pandemics, or universal epidemics. The Army knows that disease is far more potent than the striking force of the enemy.

The Medical Department of the Army is hard at work on one of its chief problems: the treatment of malaria in hot climates overseas. There are adequate supplies of essential drugs. Strong preventive action is being taken and the Army believes its record is superior to that of enemy armies.

Dysenteries (including diarrheas) constitute another menace to overseas troops. Sulfonamides help effect prompt cures.

The Army is taking every step known to science to prevent disease from win-

ning any campaign against our soldiers. The fatality rate from disease and injury is lower than it has ever been. There have been no epidemics among our soldiers overseas.

The record so far has shown that the American soldier has a better chance of surviving illness or battle injury than any soldier has ever had. We know that he is getting the best medical care that can be provided. We have reason to hope that this, the greatest war in history, fought with the most deadly weapons man has ever devised, may cost us proportionately the least in human lives.

### *Influenza in World War I*

**I**N the last war the influenza pandemic was responsible for in the neighborhood of 800,000 admissions to hospitals and for perhaps 25,000 deaths in addition to many deaths ascribed to pneumonia but brought on as a result of influenza infection. With other respiratory diseases it caused about one-third of the total admissions for disease in 1918 and roughly 80 per cent of disease deaths.



## SOME PROBLEMS IN THE TREATMENT OF DIABETES MELLITUS

ABRAHAM RUDY, M.D., F.A.C.P.

Boston, Mass.

WITH the rapid advance in the various fields of diabetes its diagnosis and treatment have been greatly improved and simplified. On the other hand, many new perplexing problems have arisen, which may disturb the general practitioner. It is my aim in this short article to review a few of these problems which confront us and to try to simplify them as much as possible.

**Diagnosis.** With the improved medical care in this country and with the widespread health examinations of the population (examinations by the insurance companies, in the schools, in the various industrial plants, government institutions, draft boards, etc.), urinalysis is carried out on a great scale. As a result glycosuria, especially in small quantities, is found more frequently than ever before. In such cases it is important to determine whether the blood sugar is elevated and whether the reducing substance in the urine is fermentable or not. If not fermentable it is not dextrose and therefore belongs to the group of harmless glycosurias. Further studies to determine the type of the reducing substance in the urine are then carried out, if facilities are available, but for practical purposes can be omitted.

Blood sugar determinations should be carried out about one hour after a high carbohydrate meal. The urine should be tested before the meal, at the time the blood is taken and about one hour later. If the venous blood sugar is above 170 mg. per 100 cc. a diagnosis of diabetes mellitus is justifiable. If it is below, a glucose tolerance test should be carried out. It is important that the subject should be on a normal diet for about a week prior to the tolerance test, since a low carbohydrate diet may cause a false diabetic curve. If the sugar tolerance curve is normal and the urine shows fermentable sugar, the diagnosis is renal glycosuria. With the introduction of selective service examinations and the more frequent examinations of the urines of children and babies it became necessary to change our old view that in children

and in young adults the onset of the diabetes is always acute. There are apparently numerous cases among the younger population with a latent and very gradual onset of the diabetes. Early diagnosis and proper supervision of these cases are of utmost importance to prevent progression of the disease.

In spite of the recent discovery in experimental animals that the pituitary may play an important part in the development of diabetes (Baumann and Marine (1), Evans *et al.* (2,3), Houssay *et al.* (4) Young (5)), it has been conclusively shown by Young (5) that eventually this pituitary factor results in pancreatic diabetes because of the destruction of the islands of Langerhans. Dietary restrictions with or without insulin, as indicated, is so far the only recognized treatment as in pancreatic diabetes. Pituitary and adrenocortical tumors should be looked for, whenever signs pointing to the involvement in these glands are observed.

**Diet in the Treatment of Diabetes.** Although the dietary treatment of diabetes has been greatly simplified there is still too much confusion as to what constitutes the best dietary regimen, a low or high carbohydrate, protein or fat diet. Some even advocate a normal diet, when insulin is used. Recent experimental work on animals confirmed Allen's (6) findings that the reduction in the total calories, by reducing the fat and the carbohydrate in the diet, is the most essential factor in the dietary treatment of diabetes. Although a low caloric diet helps in the regulation of the diabetes, the eventual aim should be a maintenance diet adequate in calories and in all the other components such as minerals and vitamins, as soon as possible, unless the patient is greatly over-weight. The average maintenance diet should consist of 150-200 grams of carbohydrates, 70-100 grams of protein, and fat enough to make up the required calories.

**Insulin.** While many patients with uncomplicated diabetes can be controlled by diet alone, some will require insulin. Whenever a complication is present, such as an infection or surgical condition, insulin may be indicated for quicker con-

trol of the diabetes. In the case of acidosis or impending coma insulin therapy must be started without delay. Regular and crystalline zinc insulin are quick in action; globin insulin also acts quickly and the effect lasts almost twice as long; while protamine zinc insulin is the slowest and longest acting of all of them. Since the various insulins have their hypoglycemic effect at different time intervals, it is important to become thoroughly familiar with the type of insulin one is using. Insulin reactions can be avoided by proper instruction of the patient as to the type of syringe, kind and strength of insulin to be used, and by careful supervision. Patients on regular insulin should have some carbohydrate about 2-3 hours after the injection. On protamine zinc insulin some food should be kept at night near the bed since the hypoglycemia may occur in the middle of the night or on rising. With globin insulin some food should be taken between breakfast and lunch and especially between lunch and supper. No extra food is needed at bedtime. For practical purposes every patient who is taking insulin should be considered subject to insulin reactions at any time, day or night.

**N**AUSEA and vomiting, especially on arising, is not an uncommon sign of hypoglycemia with protamine zinc insulin. It should not be confused with vomiting due to acidosis, an acute gastro-intestinal upset or an acute abdomen. Abdominal pain with tenderness in the presence of vomiting is very rare during hypoglycemia. It is not unusual in acidosis but in contradistinction to the pain and tenderness of the acute abdomen it clears up following the administration of intravenous saline. Amnesia and confusion are important manifestations of hypoglycemia since they may lead to accidents. Such an individual may wander around the streets in a lapse of memory, unable to find his destination. If he is driving an automobile he may experience an accident. This may happen even on a small dose of insulin. Hypoglycemia in patients on insulin should be thought of during operations and during vascular accidents, such as in coronary occlusion and cerebral hemorrhage. Patients should always carry a few lumps of sugar and a diabetic identification card with them, while the physician should have on hand a sterile 20 cc. syringe and 50 per cent glucose in 20 cc. ampoules for intravenous use.

## Complications

**Eyes.** Refractive and accommodative changes are not uncommon in uncontrolled diabetes. The most disturbing change in vision from the point of view of the patient may occur soon after treatment of diabetes has been instituted, whether by diet alone or in conjunction with insulin. It is due to the rapid changes in the water balance. It may last for several weeks and for a while it may be so severe that the patient may have difficulty in distinguishing faces. Fortunately this visual disturbance is only temporary. Glasses should not be prescribed at this time since they will have to be changed in a few weeks, unless the patient must have them for his work. Occasionally the poor vision may be due to a diabetic retinitis which was present at the time the glycosuria was discovered, or to a retrolubar or optic neuritis which may become more pronounced with the control of the diabetes. The retrolubar or optic neuritis is due to the same pathology which brings about other neuritis episodes in diabetes. In such a case the prognosis is serious; still, improvement may occur. There is evidence that diabetic retinitis is not related to arteriosclerosis, hypertension or hyperglycemia. In many of these patients the blood pressure is found to be normal.

**T**HE hemorrhages in the retina are probably due to the same cause as the tendency of the diabetic patients to bleed elsewhere. In fact, increased capillary fragility is a common finding in diabetes. (8) Hemorrhages in the vitreous are occasionally observed in diabetic patients, especially after cataract operations. There is some evidence that the hemorrhagic tendency is due to a vitamin deficiency, most likely a component of the vitamin B complex and is possibly also related to vitamin C and vitamin P. It is of interest that the process may become arrested even in very severe cases of retinitis under intensive and prolonged (for years) vitamin therapy, notwithstanding that the diabetes remains only semicontrolled. The degree of vision left depends on the degree and site of the damage brought about by the hemorrhages.

Double vision may occur during a hypoglycemic reaction, as a result of a vascular spasm, and is usually of a temporary nature. It may also be due to a cerebral accident in the presence of arte-

riosclerosis. Not infrequently it may be caused by a weakness or paralysis of one or more of the eye muscles as a manifestation of a diabetic neuropathy.

*Mouth lesions* are common in diabetes. They involve the mucous membranes, gums, teeth and at times the bones (jaw).

In the acute stage of the diabetes there may be loosening of the teeth with pain, hypertrophied and inflamed gingival papillae, bleeding, and gingival abscesses. The treatment of the diabetes should precede the local treatment of the gingivae or teeth. Many teeth can thus be saved. Extraction of teeth should be carried out on controlled diabetic patients only under medical supervision. Omission of food may precipitate an insulin reaction, while the omission of insulin may produce an acidosis. Many of the manifestations in the mouth are due to a deficiency in the various components of the vitamin B complex, such as riboflavin, niacin and pyridoxine. They are marked by fissures in the corners of the mouth, ulcerations, beefy, smooth or hypertrophied tongue, and a neuritis simulating dental pathology and resulting in unnecessary extraction of teeth. (9) Loosening of the teeth without involvement of the gingiva (10), which occasionally occurs in the diabetic patient as a result of an alveolar resorption, is also probably due to some vitamin deficiency. The process of bone resorption continues even after the teeth have been removed.

*Gastro-intestinal tract.* A peptic ulcer may be precipitated or aggravated by a diabetic diet which is rich in vegetables. On the other hand gastro-intestinal complaints suspected to be due to a peptic ulcer may in fact be the result of a low grade pancreatitis and will clear up with the control of the diabetes even on a rough, bulky, restricted carbohydrate diet. Diarrhea is not uncommon. It may be a manifestation of vitamin B deficiency.

*Cardiovascular system.* Coronary artery disease is very common in diabetic patients, even in women. Insulin should be used with caution in these patients since hypoglycemia may cause a vascular accident. On the other hand it should not be left out, when indicated.

Peripheral sclerosis is a frequent and serious complication in diabetes. Good hygiene of the feet, with special care to

avoid any kind of injury such as pressure from tight shoes, burns from hot water bottles and careless handling of calluses, helps to save many legs. It should be remembered that intermittent claudication is not always due to peripheral sclerosis. It may indicate at times the presence of a peripheral neuritis, especially when the dorsalis pedis pulsation is palpable and signs of a diabetic neuropathy can be elicited in the legs or elsewhere.

*Genito-urinary tract.* Albuminuria and edema are frequently observed in elderly diabetics. The edema is often mistaken as a sign of cardiac decompensation and treated with digitalis without any effect. The circulation is usually found to be normal. The pathology is in the kidneys and the condition is called intracapillary glomerulosclerosis. It is as a rule progressive and fatal although in some cases it may become stationary. Its etiology is still unknown. Urgency and incontinence of the urine are common in diabetic patients even in the absence of glycosuria and may be due to a neurogenic bladder. Careful investigation may reveal an unsuspected residual urine, especially in the presence of a bladder infection. Catheterization of uninfected bladders should be avoided. The presence of a residual urine can be determined by an intravenous pyelogram. Genito-urinary infections may be quite advanced and may already involve the pelves of the kidneys when first discovered. Sulfonamides are of great value in clearing the infection. The atony of the bladder and some of the other urinary symptoms are a manifestation of a vitamin deficiency, namely, the vitamin B complex. (11) The tendency to urinary infections may be due to a vitamin A deficiency.

*Nervous system.* Neurologic manifestations in diabetes are very common. They may be due to cerebral vascular accidents and not infrequently to hypoglycemia. In addition there is the generally known diabetic neuritis or neuropathy. It may affect any part of the nervous system such as the brain, with involvement of the cranial nerves and the spinal cord. It has a special predilection for the peripheral nerves.

The symptoms and complaints in diabetic patients with neuropathy are not infrequently quite bizarre and present great difficulty in differential diagnosis. As a result many mistaken diagnoses are made

before the clear-cut neurologic picture develops. Psychoneurosis is the most frequent misdiagnosis, because of the vague complaints of weakness, irritability, anorexia and various aches and pains. Patients with diabetic neuropathy on careful study give a history of or present definite symptoms of a deficiency in the various components of vitamin B complex, such as niacin, riboflavin and thiamine chloride. The thiamine deficiency explains the frequency of the psychoneurotic picture and is most likely one of the causes of the neuropathy. The deficiency is not always the result of an insufficient intake of the vitamin. It is mostly secondary and commonly brought about by several factors, such as a loss of the vitamin by polyuria and inhibition of its action by the disturbed carbohydrate metabolism or disturbed function of the liver. That diabetic neuropathy is not directly related to the glycosuria or hyperglycemia is seen in the fact that it occurs frequently in the presence of a normal blood sugar. While in some cases the neuropathy improves with the control of the diabetes, in others it becomes aggravated. The latter occurrence is explained by the fact that with the improvement in the carbohydrate metabolism the vitamin requirement is increased, while the reserve is low. The neurologic signs represent an advanced stage of the vitamin deficiency and are the result of a definite anatomic change in the nerve tissue unless the process is very acute. This would explain why the vitamin therapy (thiamine chloride and vitamin B complex) must be intensive and prolonged and why the recovery is not always complete. The sooner the therapy is instituted the better the prognosis.

Mental disturbances are frequent in diabetes, especially in elderly patients with complications. They are usually blamed on cerebral arteriosclerosis. This may occasionally be true. In the majority of cases, however, the patients improve with special attention to a well-balanced diet and the addition of vitamin B complex, especially of its components niacin and thiamine chloride. Hypoglycemia should not be overlooked as a cause.

*Skin disturbances* in diabetes are very frequent. They are not related to the glycosuria or hyperglycemia but are due to an increased vulnerability of the skin as

a result of a deficiency in the components of the vitamin B complex, especially niacin. Just like the diabetic neuropathy the skin lesions may improve, remain unchanged, or even become aggravated with the control of the diabetes. They always respond to niacin therapy. (12)

*Surgery in diabetes.* With the discovery of insulin and the remarkable advance in the treatment of diabetes and of its complications the life span of the average diabetic patient has been greatly increased. As a result more diabetics are subjected to surgery for one reason or another. With proper medical supervision the surgical risk is not much greater than in the average patient without diabetes. Precautions must be taken to avoid insulin reactions during the operation and following it. The type of anesthesia to be used is of special importance. Spinal or local anesthesia is best. General anesthesia should be used only if there is no other choice since it affects the carbohydrate metabolism. The postoperative care of the patient is also more difficult because of the drowsiness and vomiting. Preoperative and postoperative sedation should be used with caution and in smaller doses than usual. Intravenous 5 per cent glucose in saline may be given postoperatively and during the operation. The insulin requirement is smaller in some cases and larger in others after the operation. In the case of surgery for an infection or for hyperthyroidism, the insulin requirement may drop very markedly. Blood sugar determinations preoperatively and during the day of the operation 1 or 2 hours after the glucose should help to regulate the insulin requirement. The intravenous glucose and the urinary retention interfere with evaluation of the urinary sugar. Catheterization and especially continuous urinary drainage should be avoided.

#### References

1. Baumann, E. J. and Marine D.: Glycosuria in rabbits following injections of saline extract of anterior pituitary. *Proc. Soc. Exper. Biol. and Med.* 29:1220-1223, 1932.
2. Evans, H. M., Meyer, K., Simpson, M. E., and Reichert, F. L.: Disturbance of carbohydrate metabolism in normal dog injected with hypophyseal growth hormone. *Proc. Soc. Exper. Biol. and Med.* 29:857, 1932.
3. Evans, E. L.: Diabetogenic principle of anterior pituitary. *Proc. Soc. Exper. Biol. and Med.* 30:1370, 1933.
4. Housay, B. A., Blasotti, A., Rionti, C. T.: Accion diabetogena del extrato antero-hipofisario. *Rev. Soc. Argent. de Biol.* 8:469-481, 1932. *Action*

—Concluded on page 43

## FUNDAMENTAL DRIVES AND THEIR CONDITIONING

### BENJAMIN POLLACK, M.D.

Clinical Director of Psychiatry.  
Rochester State Hospital  
Rochester, N. Y.

The pattern of a future personality may be regarded as beginning almost from the time of conception. In the uterus everything exists for the comfort of that individual. The libido or energy outflow (love capacity or id) is devoted entirely to the individual and is turned inward on himself. Food, heat and all comforts are provided with a minimum of effort. It is at this point that the pleasure principle reigns supreme and no external conflicts or problems are present to distract or annoy him. The world appears to revolve about him and to exist only for him. Life continues at a low ebb and all wants are satisfied. He is omnipotent and reigns supreme. Everything seems to be provided for him and no one else. There are no conflicts with others. In later life many mental disorders may demonstrate this rule of dictatorship or feeling of omnipotence when the individual, unable to face life's real or imagined responsibilities, regresses to this earlier state in an effort to escape actuality.

**D**URING birth, the first serious disturbance takes place in his comfort. To his utter surprise and woe, he is buffeted through the birth canal and subjected to a taste of some of the future difficulties and problems that he may have to face. This is not all. Following birth, he lies in a state of agony, choking and gasping until he is able to obtain his first breath. To his discomfort, a few sharp blows on the buttocks may be added. The initial cry and its consequent relief produces a feeling of pleasure. This may result in a return to this type of behavior (crying) whenever he wishes to obtain satisfaction but is unable to do so through his own efforts or does not desire to expend the necessary energy to do so. He now finds himself in an entirely different environment. There are external problems to cope with. These, of course, at first, are few and, to some extent, produce pleasure, such as eating, bowel move-

ments and micturition. There are, however, discomforts consisting of varying temperatures and the annoyance of associating with others, usually the parents who intrude upon his privacy. For the most part, he is still left undisturbed to indulge in his pleasure principles. This is early love and consists of an energy outflow which comprises the dawn of sex in its broadest form (narcissism). His first approach to the outer world, following his discovery of food and excretion, is the realization that he has a body. He sucks his toes and his fingers and discovers that he has various sensations, some of which produce pleasure, others pain. He gradually begins to hear and see. His muscles begin to have purposeful movements and gradually there comes a realization that he is an individual, different and distinct from others. Certain areas continue to give him greater degrees of pleasure and appear more sensitive. These comprise the body orifices such as the lips, the tongue, the mouth, the urethra, the genitalia and the anus. Most of these produce a sensation of pleasure. The early life of the infant accentuates this as he is generally occupied with eating, with his excretions and with purposeless movements.

**L**IFE is still at a low ebb level and has a minimum of demands. Food and all his wants continue to be supplied but there gradually occurs an increasing need for self effort and compromise. He is no longer the omnipotent dictator, much as he struggles to recapture this state. There is a greater need for adjustment as increasing frustration of his desires continues. This readjustment may not always occur nor be entirely successful and various compromises or partial solutions or resolutions may result. A need is produced for a satisfactory balancing of contrary principles or polarities of opposing forces. Such repressions and sublimations may govern future patterns in life. If this circumstance results, it may set up a pattern in which the individual is constantly unable to meet the greater problems of life. As a result he frequently returns to earlier patterns in an effort to escape disagreeable consequences or emo-



tions. This may be noted in various escape mechanisms of an infantile character leading to irritability or aggressive conduct.

In this way the conscience or the unconscious libidinous forces are set up. It is an acquired characteristic fundamentally determined by the parents and others with whom the child associates in the early formative days. Frequently it is a mirror of environmental influence. Stern, harsh parents frequently make a child believe that pleasure and sin are synonymous. Such parents are usually produced by a sense of their own guilt and inability to cope with their own problems. An attempt is made to make a child pay for the things that they could not live up to. This pattern of the parents reproduced in the child may be altered by substitute parents. Indeed, quite often the picture that the child or adult carries through life is not that of the true parent but a parent ideal or substitute that has been evolved in that individual's imagination through the formative years. This phantasy or imaginary parent is a composite picture of the real parents, the teacher, the nurse, and other members of the family or individuals in authority such as physicians, ministers and police. The early patterns formed in the first few years of life are difficult for the adult to get away from and constantly rule and motivate his actions, usually in an unconscious manner. The mother frequently denotes sustenance, shelter, comfort, encouragement and forgiveness. The child attempts to see this in other women as he grows older and, if unable to do so, may feel cheated, especially so if he is unable to discern this in a woman whom he takes for his wife. The father, on the other hand, frequently represents authority, discipline, pain and often inconsistency. He is the emblem of the presence and of the rule of the pain principle. This is often noted in later life in defiance, antagonism and resentment of authority and law. The adult tries to recapture, in the phantasy of the child, the mate of his later years. This is noted in the formation of certain patterns which are conditioned by the attitudes resulting from such environmental struggles. It may often disturb the emotions of the child.

**T**HIS confuses the pattern of the child. Lack of resolution may later result in inferiority feelings and failure to marry

with a constant sense of dissatisfaction.

The major need of all children, and of adults as well, is the need for success. This may be compensated for in part by achievement, various hobbies or positions which make the individual feel important, such as a club officer or member of church, Sunday school, mission or choir, or as a leader in other fields. This may serve a useful purpose when others look up to him. The need of society is to find a method whereby a person is made legitimate and socially acceptable. This makes the individual himself have a feeling of importance rather than a mere sense of responding to a social contact as an outlet. Children may and often do feel rejected by their parents, who may attempt to make them fit into patterns which serve as outlets for their own emotions. Later in life this may again be demonstrated by stress or conflict, quarrelsomeness or retreat as the easiest method of treatment of unpleasant situations.

**S**EXUALITY is not confined to the genitalia but is expressed in the total personality. In normal development, individuals pass through the various stages of narcissism and homosexuality until they reach heterosexuality and an adult level. There may be, however, remnants of lower levels left and these may retain their former dominance when the individual is met by circumstances which he is unable adequately to face. Partial personality reactions instead of total reactions then result.

In the past ignorance was confused with innocence and knowledge with guilt or shame. When a child is encouraged to lean on his mother and permit her to make decisions and carry responsibilities, a pattern of responses is built up in later life which becomes incorporated into conscience and becomes a part of him. As a result, if he disobeys his mother—real or substitute—a sense of guilt occurs. It may result from either overseverity or overprotection on the part of the parent. A so-called dutiful child has frequently failed to cut his mother's apron strings. Such an individual is in close association with his family and is unable to make any decisions or enter new fields without consultation with them, or to engage in conduct which he believes would be unacceptable to them. He continues replicas of patterns of parents instead of re-evaluating them. Some even choose professions,



mates and homes on the basis of how close this resemblance appears to be.

**E**ARLY in life the individual loves himself best and next, the parent, usually of the opposite sex. However, frustration occurs early and this energy is diluted by admiration of another individual of his own sex. This is seen in the so-called homosexual stage, through which all individuals pass. Boys tend to go with boys and girls with girls. Boys tend to gang up, indulge in rough conduct and deride the gentler behavior of the opposite sex. Girls, likewise, associate together and look with scorn upon the rough boys in the neighborhood. They like to share their pursuits, their clothes, have crushes on each other and enjoy hugging and kissing each other. This is a normal state of development. Later it is noted that the boys gradually begin to break away from their gang, begin to dress up, pay more attention to their appearance and, one by one, are attracted to the girls whom they formerly scorned. The same pattern occurs for the girls and in this way, gradually, heterosexual development is reached. Life begins to go forward on an adult level. This has all been achieved by compromises, sublimations and rationalizations. This type of conduct is produced to cope with frustration and discomfort and evolves a satisfactory solution. There is always an interplay of the original pain and pleasure principles. Consciously or unconsciously a solution is produced which comprises a compromise of both instinctive drives. It is important to realize that many of the behavior patterns of later life are conditioned by the time a child is five. Indeed, many of the patterns are laid down in the first year of life. Individuals are too often prone to state that a baby of a year knows very little. Wise parents quickly learn that a child knows much more than he is usually given credit for. What is usually called bad heredity is often actually the result of the bad example of parents. The child is brought up in the same environment and naturally imitates them. However, good heredity can likewise be spoiled by other factors. Much repression is often unnecessary if the parent can devise methods whereby the child can attain his desire without being offensive to others. This is frequently accomplished by having the child do something useful instead of converting his

energy into the form of temper tantrums to attain his desires with minimum effort. A feeling of accomplishment is a satisfactory award not only for the child but also for the adult. In this manner, a feeling of self reliance in facing future tasks is produced.

**T**HE individual is emotionally satisfied when he is able to obtain a fair measure of contentment and happiness from the ordinary occurrences of life and to withstand life's hard knocks without disintegrating. Our reactions are pictures of our physical and emotional health, interacting on one another and expressed by our ego or our very selves. It is not possible arbitrarily to separate an individual from his environment and past experience. There is no division between the mind and the body and one reacts upon the other. Man is one. There is no control of mind over matter or matter over mind. Both are always combined and the degree of the success of this union of body and mind is an indication of how both body and mind will react when faced with external problems. An unsuccessful reaction or solution will lead to neuroticism. Here an attempt is made to disguise failure by blaming the body for unsatisfied emotional states and tensions. In this manner is built up the picture of the chronic invalid, who always becomes sick when faced with a problem he does not wish to cope with or responsibilities he is unable to meet. Less adequate solutions may lead to the onset of the major psychoses, and this is an indication that the mechanisms of compromise, repression, rationalization or sublimation have failed and that the unconscious forces have for the time being free play. Conduct at no time is unmotivated. Every thought and action finally takes form as the result of a struggle of forces which for the most part has taken place at an unconscious level so that the individual is unaware of the actual steps that have taken place even for simple acts. Thus we are at times puzzled as to why we do certain things, or act in various fashions. Slips of the tongue, dreams, wit and impulsive actions are examples of this motivation. We are always the result of our past. Nothing is ever actually forgotten, but much painful material may be so successfully repressed that we actually believe that it has been entirely eradicated. What we are and

what we do and think is a composite picture of what we have faced since birth and how successfully we have been able to confront and solve the problems that have arisen. This stamps one as an individual distinct from others and other people recognize one not only by one's appearance but also by one's habitual manner of thought and speech and manner.

#### Summary

An attempt has been made to indicate in a simple manner that every individual is controlled by unconscious forces which

have been conditioned throughout life, from birth to death, by factors present in the environment. All acts are the result of a compromise by at least two opposing forces. A well integrated individual has managed to maintain a successful balance, whereas a neurotic is always in a state of imbalance and is therefore always under so-called nervous tension. A psychotic is one in whom the attempt at successful resolution has failed and the unconscious forces have free play or act in a disorganized manner.  
1850 South Avenue.

## DEDUCTIVE ANALYSIS

### MARK H. SMITH, M.D.

Glendale, California

**C**ONAN DOYLE, protégé of a preceptor who was a very close observer, wrote of some of his snap diagnoses in the person of Sherlock Holmes.

The school of a hundred years ago of illustrious diagnosticians is almost a memory. With such tactile and sensory reliances as they possessed, the turn of a century ago virtually claimed them as almost extinct. One of the last was Corvisart, physician to Napoleon, whose diagnostic ability was second to none.

Yet today the busy physician is confronted with patients who come with such impossible diagnoses as to make him wonder. This wonder is as to his own incompetence or how the other physician maintains a standing.

Despite the illumination which twenty years has uncovered in heart complaints, the very common differences in diagnoses which appear in this field surpass all others.

It is common to find diagnoses which are virtually limited to the circulatory changes of age being readily made in youthful patients.

**I**N general, men patients care little for diagnoses; they want relief of the disturbance which calls attention to some physical annoyance. Usually this is a type of what is called "heart consciousness." In the main it is a pounding heart; an odd feeling in the region of the heart; a sudden recognizable pound; a feeling of

faintness or of something missing.

The head on the pillow may notice it if the ear is pressed down. It may awaken one at night with a fear of disaster in the sudden thought that something is wrong. The hand seeks the wrist and notes perhaps a disturbance in pulse rate, a pause, then a strong beat.

These annoyances are apt to appear after the age of forty and the afflicted one goes to the doctor.

Heart consciousness is very apt to show with an accompanying tenderness over the left nipple area. Here men are apt to place a hand or finger in search of a tender spot. If found, more conviction of a heart trouble is present.

While women are not so apt to be affected by the missing or reinforced heart beat that men notice, they are more apt to present tender or painful left pectoral areas. It is usual to find areas tender to touch in locating the apex beat in these patients.

If the same condition appears on the right side at a corresponding site, little concern is felt, but if related to the heart area, there is foreboding.

**I**T is well in mollifying the anxious state in men and women of this approximate age of forty or past, to compare the present age with that of a hundred years or so ago.

The recognition that hardening arteries are appearing at the age of forty should be couched in terms that are not of an alarming nature.

Factors other than hardening arteries

MEDICAL TIMES, FEBRUARY, 1944

restrict the flow of blood. With the increase in fat deposit in years when activity lessens, a favoring cause of interference with heart function is fat deposit at the cardiac apex. With loss of elasticity of blood vessels in the course of the slow fibrosis which attends aging, and the crowding sense of fullness after mealtime, distress is frequent.

The patient may loosen the waistline of his garment, but he adds to his difficulty by huddling over in the easy chair perhaps to read, smoke or drowse.

The evening meal is heavy; digestion covers a period of hours before churning activity ceases. During this period when heart activity should be helped by reduced call upon activity in the hours when fatigue is maximum, blood pressure is elevated, the pulse is more frequent, and the lung capacity is lessened.

With the digestive process pouring material into the vena cava at its junction with the right auricle, pulmonary pressure, already great, is increased, and there is greater reason for a coronary attack.

**PHYSICIANS**, however, are apt to overlook a very important factor in these disturbances associated with pain in the left cardiac area.

Most women have their breasts and upper chest lightly clad. The arms are exposed with little or no protection against change of temperature in the sleeping room.

Examination of such patients will show a cool surface of the upper body while the lower body is sufficiently warmed with covering, sheets and perhaps blankets.

The fascia of the pectoral regions is of the same nature as other structures of fibrotic character, which are so sensitive to what we call "rheumatism."

Moreover, in women the larger breast

having more intermediate fascial structure, we get an added sensitivity.

Herein is the key to much of the distress that causes womankind to seize upon heart trouble as being present.

A similar exposure in relation to men is the driving of cars with the left arm and side exposed to an open window conveying a draft inward.

Time and again reasons for presumed heart sufferings with localized pains over the left side of the chest have been dispelled by noting the night bed covering, with alleviation following antirheumatic measures.

Endocardiographic studies show that hot and cold applications to areas proximal to the apex of the heart change the potentials or complexes of heart currents.

**ANYTHING** which will have so reflex an effect from skin to the heart, most certainly will affect superficial sensitive nerve plates.

Here is repeatedly shown a reason for complaints brought by the patient with acute and sudden angina-like pains from driving in cool air or at night.

One should investigate the sleeping chamber and observe where the bed is placed with respect to exposure to and effects from window or door drafts.

Then, one asks as to the night clothes, what covering is assumed for the upper body and in arising at night, whether slippers are worn or the feet allowed to become chilled.

Patients who are required to visit the toilet during the night should have a shawl over the shoulders and a light blanket over the lower limbs.

Such sensible measures will often prove all-sufficient in the course of the study and management of certain so-called heart complaints.

1508 Grandview Avenue.



## SOME PROBLEMS IN THE TREATMENT OF DIABETES

—Concluded from page 38

diabetogene de l'extrait ante-hypophysaire. *Compt. rend. Soc. de Biol.* 111:479-481, 1932.

5. Young, F. G.: The anterior pituitary gland and diabetes mellitus. *New Eng. J. Med.* 221:635 (October) 1939.
6. Allen, F. M.: Studies concerning glycosuria and diabetes, Cambridge (Mass.) Harvard Univ. Press, 1913.
7. Rudy, A. and Sachs B.: Transitory visual disturbances in diabetes mellitus. *New Eng. J. Med.* 212:1157 (June) 1935.

8. Beaser, S. B., Rudy, A., and Seligman, A. M.: A study of capillary fragility in relation to diabetes mellitus, hypertension and age. *Arch. Int. Med.* (In Press).
9. Rudy, A. and Cohen, M. M.: Oral aspects of diabetes mellitus. *J. of Am. Dental A.* 29:523 (April) 1942.
10. Cohen, M. M. and Rudy, A.: Periodontal studies in diabetes mellitus. *Am. J. Ortho. and Oral Surg.* 28:346 (June) 1942.
11. Rudy, A. and Muellner, S. R.: The neurogenic bladder in diabetes mellitus: Early recognition and treatment with a report of cases. *J. of Urology*, 45:6 (June) 1941.
12. Rudy, A. and Hoffmann, R.: Skin disturbances in diabetes mellitus: Their relation to vitamin deficiencies. *New Eng. J. Med.* 227:893 (December) 1942.

311 Commonwealth Avenue.

## CULTURAL MEDICINE

### "THOU RENEWEST EVERY DAY THE WORK OF CREATION"

MAX HUHNER, M.D.

New York, N. Y.

NO one knows who first made this statement, but it has existed in Hebrew literature for many centuries, and has a place in its liturgy.

The early commentators gave a poetical explanation, asserting that the ordinary transition of day to night and of night to day constituted a renewal of the work of creation.

It may be that these commentators were correct, and that the original author of the statement, whoever he may have been, considered it merely from a poetical point of view. If this be the case, he builded better than he knew, for the statement itself is absolutely in accord with modern science.

According to our latest modern scientists, man gradually evolved from the fish stage until he finally attained his present status. This evolution probably took millions of years. According to these scientists, however, every human being who is born today must go through the same evolutionary cycle from the fish stage, but the process instead of taking millions of years, now requires only about nine months for its accomplishment. It is absolutely true, therefore, that in the development and birth of every human being, the work of creation is actually renewed.

It is a fact that in the process of development of every human embryo, many of the important organs resemble organs which have developed in the lower animals from the fish to man, and in many cases these are absolutely indistinguishable from such lower organs.

I will now quote the opinions of our very latest modern scientists, to emphasize the truth of the above statement.

In his important work "Your Brain and its Story," Professor Berry (1), after discussing and comparing the brains of the

1. Berry, R. J. A.—YOUR BRAIN AND ITS STORY.

2. Gregory, William K.—OUR FACE FROM FISH TO MAN. G. P. PUTNAM'S SONS. THE KNICKERBOCKER PRESS, 1929.

reptilian age with that of modern man, says (page 10), "But every living human being goes through these stages, and in his own development from that of the fertilized ovum to birth, reproduces within himself the ancestry from which he results."

The same author (page 24), in discussing the evolution of animals, says, "With the true fishes, which follow the hags and the lampreys, we begin to see the rudiments of our own nervous system, and every human being reproduces, in his own prenatal life, these fish-like stages."

AGAIN, Professor Gregory (2), in his work "Our Face from Fish to Man," says: (page 120) "At a very early state of its development the human embryo passes through a stage in which the olfactory capsules, like those of sharks, have no internal opening on the palate but are merely extended backward and downward toward the mouth."

Farther on, the same author (page 122) states, "The human embryo, in the latter part of the first month, shows a resemblance to a generalized type of fish; it possesses the basis of a branchial arch system. As in the fish, the olfactory organ is represented by a pair of pits or depressions, which at first have no communication with the mouth."

"Thus in the evolution of the face there have been three distinct stages: (1) a piscine, in which the nose and mouth were formed independently; (2) an amphibian stage, where the nasal respiratory passage opened on the roof of the mouth; (3) a mammalian stage, in which it opened in the nasopharynx. In the development of the human embryo we see these three stages reproduced."

He also makes the following statement: (pages 126, 127, 128) "During the course of embryonic development the human tongue, the larynx and adjacent structures reveal a remarkably detailed resemblance to the corresponding structures of the lower vertebrates. Each of the so-called "gill-slits" of the human embryo of the fifth week may be compared directly with a corresponding one in the

foetal and embryonic stages of other mammals, of reptiles, amphibians and primitive fishes, and in the fishes these clefts are definitely associated with functional internal gills." On page 134 he states, "It is surprising that even today, after hundreds of millions of years' advancement beyond our shark-like ancestors, each human being, during the embryonic development of his teeth, starts at a shark-like state."

**G**EORGE W. CORNER (3), in "The Hormones in Human Reproduction," discusses the evolution of the human embryo from its fish-like ancestors: (page 217) "The sperm cells must be stored in a particular way, immersed in a watery environment, for the mammals have never fully shaken off their ancient adaptation to the sea. They spend their lives on land, but when the time comes to reproduce their kind, their spawning requires salt water—not indeed the actual sea, but the internal fluids of the generative organs. The egg ripens in the fluid of the Graafian follicle. The sperm cells accomplish their tortuous journey to the egg by swimming, and the offspring of all the mammals spend the long term of gestation in a submarine environment."

Professor Henry E. Crampton (4), in his "The Coming and Evolution of Life," puts the fact very simply and definitely, (page 56) "Individual history of development is a brief résumé of the primary episodes of its evolutionary production, or more briefly, ontogeny recapitulates phylogeny." This is a brief and beautiful form of stating the fact that, in development, every day the work of creation is renewed.

**A** GAIN, Hooten (5) goes into considerable detail showing the similarity in the development of a human fetus with evolution. He says, (pages 226-228) "Our present interest in the development of the individual—embryology—is concentrated upon the evidence of evolution which this process presents. The most controversial subject in embryology is the so-called recapitulation theory, which holds that the embryonic development of the individual is to some extent an abbreviated record of the zoological history of his species—that the individual 'climbs up his own family tree.' This theory is based upon the ap-

pearance in the embryo of structures which are found in the adults of lower forms of animal life, but which disappear before birth or are replaced by other structures in the fully developed animals whose embryology is being studied. The assumption is that such embryonic structures represent ancestral features lost in the process of evolution. Thus, to cite the most familiar example, the presence of gill arches and gill grooves with their associated blood supply as transient embryonic structures in the higher vertebrates leads to the conclusion that these vertebrates are the ultimate descendants of fishy ancestors who possessed in adult life functioning gills by means of which respiration was carried on.

"There may be a number of temporary structures which at one time or another in embryonic development recall or suggest reptilian or piscian ancestry. It is certain that similar embryonic processes in different animals must be regarded in a general sense as indicative of a common ancestry.

"Thus embryology does not give a complete picture of the evolution of the race in the development of the individual; it merely contributes scraps of evidence that evolution has taken place. These are, as someone has said, like disconnected flashes of a cinema film, pieced together more or less in the order of their taking, but with many of the crucial scenes omitted and others given a prominence that reflects their final importance rather than the order of their occurrence."

**H**OOTON finally briefly summarizes his conclusions as follows:

Page 234

"In many of the changes in size and proportion of bodily parts during foetal life, man shows a close similarity to the other primates and particularly to the anthropoid apes."

Page 236

"The legs of man in adult life are relatively and absolutely far longer than those of any other primate. But in the prenatal period this excessive length of the human lower limb is lacking."

3. Corner, George W. — THE HORMONES IN HUMAN REPRODUCTION. PRINCETON UNIVERSITY PRESS, 1942.

4. Crampton, Henry E. — THE COMING AND EVOLUTION OF LIFE.

5. Hooten, Ernest Albert—UP FROM THE APE. MACMILLAN COMPANY, 1931.



Page 238

"There is, however, no real doubt that the evidence of embryological development by itself is enough to establish the kinship of man with the primates and his most intimate relationship with the great apes."

Page 493

"In early foetal life the length of the arms exceeds that of the legs although in the course of development this superiority in arm length is rapidly reduced."

**F**INALLY, Charles Darwin (6), in his epoch making work "The Origin of Species," devotes many pages to this similarity between the developing foetus and the evolution of mankind from the primary fish stage. I have picked out but one illustration which Darwin gives, showing the relationship of the developing eye in the human foetus as compared with other vertebrata: (pages 134, 135) "Within the highest division of the animal kingdom, namely, the Vertebrata, we can start from an eye so simple, that it consists, as in the lancelet, of a little sack of transparent skin, furnished with a nerve and lined with pigment, but destitute of any other apparatus. In fishes and reptiles, as Owen has remarked, 'the range of gradations of dioptric structures is very great.' It is a significant fact that even in man, according to the high authority of Virchow, the beautiful crystalline lens is formed in the embryo by an accumulation of epidermic cells, lying in a sack-like fold of the skin; and the vitreous body is formed from embryonic sub-cutaneous tissue."

In his other monumental work, "The Descent of Man and Selection in Relation to Sex," Darwin (7) makes the following statement: (page 411) "With respect to development, we can clearly understand, on the principle of variation supervening at a rather late embryonic period, and being inherited at a corresponding period, how it is that the embryos of wonderfully different forms should still retain, more or less perfectly, the structure of their common progenitor. No other explanation has ever been given of the marvelous fact that the embryos of a man, dog, seal, bat, reptile, etc., can at first hardly be dis-

tinguished from each other. In order to understand the existence of rudimentary organs, we have only to suppose that a former progenitor possessed the parts in question in a perfect state, and that under changed habits of life they became greatly reduced, either from simple disuse, or through the natural selection of those individuals which were least encumbered with a superfluous part, aided by other means previously indicated.

"Thus we can understand how it has come to pass that man and all other vertebrate animals have been constructed on the same general model, why they pass through the same early stages of development, and why they retain certain rudiments in common."

Darwin also states that "The progenitors of man must have been aquatic in their habits; for morphology plainly tells us that our lungs consist of a modified swim-bladder, which once served as a float."

**T**HUS we see that the foremost scientists of our time have concluded that the human fetus goes through exactly the same stages in a few months, as that of mankind in general in millions of years, thus showing that the ancient Hebrew statement "Thou renewest every day the work of creation" is fully in accord with modern science.

In the above instances I have only considered the development of man. I have been told by botanists that the same process takes place in vegetable life. If this be so, with every plant that develops today the work of creation is renewed accordingly.

To the above, I wish to add another thought, namely, that the same process takes place psychologically as has just been demonstrated anatomically. Prehistoric man, and even subsequent man, for many generations is barbaric in nature and craves everything, and does not hesitate to satisfy his craving and desires by any method he is capable of, irrespective of such conditions as conscience, morality and ethics. Darwin mentions having seen a savage who was displeased with some action of his own very young child, in a fit of rage, grab the child and throw it against the rocks, killing it. It is only after millions of years of development that man has recognized certain inherent

—Concluded on page 62

6. Darwin, Charles—THE ORIGIN OF SPECIES. THE MODERN LIBRARY. NEW YORK.

7. Darwin, Charles — THE DESCENT OF MAN AND SELECTION IN RELATION TO SEX.



# CANCER

*Edited by John Mumford Swan, M.D. (Pennsylvania), F.A.C.P.  
Executive Secretary of the New York State Committee of the  
American Society for the Control of Cancer, Inc., assisted by  
Charles William Hennington, B.S. (Rochester), M.D.  
(Hopkins), F.A.C.S.*

## FIVE TO NINE YEARS SURVIVAL OF PATIENTS FROM THE ROCHESTER HOSPITALS

The war has seriously disrupted our program of following patients who have reached the five year survival period after treatment for cancer in our hospitals and we are obliged to record a larger number than usual of patients who are lost. This is partly due to the fact that the physicians are in the Army and the Navy and that the patients have been moving around in search of employment in war industries. In addition to this the Social Service Departments of the various hospitals are understaffed. However, Table 1 will show the present condition of those patients whom we have been able to trace: patients treated in 1934, 1935, 1936, and 1937 and reported as five year survivors in 1939, 1940, 1941 and 1942.

For one of the patients surviving treatment for carcinoma of the fundus of the uterus treated in 1935 who died of cardiovascular disease we have the following information. The patient, aged 74 years, was first seen by Dr. Prince on July 25, 1935. She had a total hysterectomy and the pathological report was adenocarcinoma of the uterus. She was reported a five year cure in 1940 and died July 4, 1943 of general atherosclerosis. At the age of 74, she had an expectation of life of 6.68 years. She lived 7.87 years or 117.8% of her life expectancy.

This year we are adding 62 cases to the 602 on our records last year making a total of 664 who have survived the five year period. The distribution is as follows:

### OPERATED 1938—REPORTED 1943

#### GENESEE HOSPITAL

1. Bladder	Staff
2. Breast	Mitchell

Reported at the 18th Annual Meeting of the New York State Committee of the American Society for the Control of Cancer held at the Strong Memorial Hospital, Rochester, October 5, 1943.

MEDICAL TIMES, FEBRUARY, 1944

3. Breast	Staff
4. Breast	Sumner
5. Breast	Davis
6. Sarcoma	Bascom
7. Uterus: Cervix	Staff

#### HIGHLAND HOSPITAL

1. Breast	Gibb
2. Colon	Calihan
3. Kidney	Parlow
4. Lip	Calihan
5. Sarcoma	Carl Harris
6. Sigmoid Uterus	Dean
7. Fundus	T. Jameson

#### PARK AVENUE HOSPITAL

1. Breast	Gage
2. Breast	Bowen
3. Ovary Uterus	Clark
4. Cervix	Smith
5. Cervix	Lapi
6. Cervix	Potter

#### ROCHESTER GENERAL HOSPITAL

1. Bladder	Killip
2. Breast	Costello
3. Breast	Costello
4. Breast	Potter
5. Breast	D'Amanda
6. Breast	Wood
7. Breast	Leonardo
8. Melanoma (eye)	Lerner
9. Rectum	States
10. Skin	McLoughlin
11. Stomach Uterus	McLoughlin
12. Fundus	Potter
13. Fundus	McGill

#### ST. MARY'S HOSPITAL

1. Breast	Simpson
2. Ovary	Simpson
3. Testicle	Simpson

STRONG MEMORIAL HOSPITAL		Summary	
1. Bladder	14. Cervix	BLADDER	3
2. Breast	15. Cervix	BREAST	15
3. Colon	16. Cervix	COLON	2
4. Larynx	17. Cervix	KIDNEY	1
5. Lip	18. Cervix	LARYNX	1
6. Skin	19. Fundus	LIP	2
7. Skin	20. Fundus	MELANOMA	1
8. Skin	21. Fundus	OVARY	2
9. Skin	22. Fundus	RECTUM	1
10. Skin	23. Fundus	SARCOMA	2
11. Skin	24. Fundus	SIGMOID	1
12. Stomach	25. Fundus	SKIN	7
Uterus	26. Fundus	STOMACH	2
13. Cervix		TESTICLE	1
		UTERUS	21
		CERVIX	10
		FUNDUS	11

TABLE I

	To Be Accounted For	Living	Dead	Lost
<b>CARCINOMA OF THE BREAST:</b>				
Treated in 1934 (9 year survivals)	13	11(1)	1(2)	1
Treated in 1935 (8 year survivals)	15	11	2(3)	2
Treated in 1936 (7 year survivals)	25	20	1(3)	4
Treated in 1937 (6 year survivals)	33	21	3(3)1(4)	8
<b>CARCINOMA OF THE GASTRO-INTESTINAL TRACT:</b>				
Treated in 1934	9	6	0	3
Treated in 1935	6	4	0	2
Treated in 1936	5	3	1(3)	1
Treated in 1937	16(6)	12(5)	1(3)	3
<b>CARCINOMA OF THE GENITO-URINARY TRACT:</b>				
Except Uterus and Ovary				
Treated in 1934	5	3	0	2
Treated in 1935	2	2	0	0
Treated in 1936	1	1	0	0
Treated in 1937	3	2	0	1
<b>CARCINOMA OF THE OVARY:</b>				
Treated in 1935	2	2(5)	0	0
Treated in 1936	4(7)	4	0	0
Treated in 1937	3	1	1(3)	1
<b>CARCINOMA OF THE UTERUS:</b>				
Cervix				
Treated in 1934	9	9	0	0
Treated in 1935	4	3	0	1
Treated in 1936	7	5	0	2
Treated in 1937	9(6)	7	1(3)	1
Fundus				
Treated in 1934	2	2	0	0
Treated in 1935	9	6	2(3)1(2)	0
Treated in 1936	8	7	1(3)	0
Treated in 1937	13	7	3(3)	3
<b>MISCELLANEOUS MALIGNANCIES:</b>				
Treated in 1934	3	3(8)	0	0
Treated in 1935	3	2(5)	1(3)	0
Treated in 1936	8	7	1(2)	0
Treated in 1937	10	2(5)	1(3)	7
	227	163	22	42

- (1) One has diabetes  
 (2) Died of cardiovascular disease  
 (3) Died cause unknown  
 (4) Died of cancer

- (5) One with recurrence  
 (6) One with double cancer (sigmoid & cervix)  
 (7) One lost last year, reported living this year  
 (8) One insane following thyroid body carcinoma

These patients were treated by 26 different surgeons and in addition 26 were treated by unspecified members of the staffs.

The death rate for cancer since 1926 has been increasing at the rate of about 3% per year. It has been suggested that the first indication of improvement in the cancer situation in a community will be that the curve of this steady annual increase will begin to flatten out, and we have noted this phenomenon since 1935. In that year the death rate from cancer in upstate New York was 147.5; in 1936 it was 147.5; in 1937 it was 150.3; in 1938

it was 153.5 in 1939 it was 153.3; in 1940 it was 151.0; in 1941 it was 150.9; and in 1942 it was 152.8.

The following table will show the overall salvage in our six hospitals for the past two years.

### Bibliography

Previous reports of five to nine year survivals have been made as follows:

MEDICAL TIMES: July, 1932; 60:218. June, 1933; 61:179. March, 1934; 62:81. May, 1937; 65:253. May, 1938; 66:246. March, 1939; 67:125. May, 1940; 68:223. July, 1941; 69:307. November, 1942; 70:390. June, 1943; 71:185, and in the New York State Journal of Medicine: July, 1935; 35:731.

	1937			1938		
	Admissions	Survivals	percent	Admissions	Survivals	percent
Genesee	113	8	7.08	134	7	5.22
Highland	76	10	13.1	95	7	7.37
Park Avenue	34	8	26.4	38	6	15.7
Rochester General	129	17	13.1	94	13	13.8
St. Mary's	91	11	12.0	99	3	3.03
Strong Memorial	390	35	8.97	432	26	6.0
Municipal						



### The Soldier and His Health Overseas

THE health of the Army is better than it has ever been. Since Pearl Harbor, the Army's death rate from disease and injury has been the lowest in its history.

The records of the armed services reflect their thorough organization for health, the bases of which are: vaccines; rigorous sanitation; pre-induction screening (weeding out) of recruits supplemented by frequent post-induction health examinations; scientific research to provide troops with protections, proper nutrition, and suitable health devices for all environments, and ample hospitalization facilities.

An average of a little more than 3 per cent of the Army personnel in this country was off duty because of sickness or non-battle injuries at any given time during 1942; abroad, the rate was slightly lower, even including battle casualties.

The Medical Department of the Army is hard at work at present on one of its chief problems: the treatment and prevention of malaria in hot climates overseas. The malaria rate has risen because of the increased war activity in malarious areas.

The record has been: no cases of yellow fever or plague; extremely few (less than 20) cases of smallpox, tetanus, or typhus; very infrequent cases of typhoid, during the war so far.

While there is reason to believe that vaccines will prevent these diseases in most exposed persons, the other control measures are never neglected. All possible sanitary steps are still taken.

"We've succeeded against wounds and diseases only because we've got powerful weapons with which to fight them. That we have . . . drugs and, in most cases, enough of them, is due to the . . . men and women in the drug industry here at home."—Col. Paul I. Robinson, Director of Army Procurement Medical Supplies.

# CONTEMPORARY PROGRESS

## PHYSICAL THERAPY

### *Control of Postoperative Pain; Application of Cold to the Operative Site*

E. G. KRIEG (*American Journal of Surgery*, 62:114, Oct. 1943) reports the use of ice caps applied to the operative site immediately after operation for the control of pain. The dressing consists of a double thickness of cellophane sealed to the skin by strips of adhesive tape, providing "a waterproof dressing of good conductivity"; one or more ice caps without the usual "flannel jacket" are placed directly on the cellophane; the ice caps are refilled when the ice melts—every one to three hours. The temperature induced at the wound site by this method is approximately 6° C. This method has been used in 185 operations of various types in adults; 36 of these patients required no narcotic for the control of postoperative pain; in the other cases morphine  $\frac{1}{4}$  or  $\frac{1}{6}$  gr. or codeine 1 gr. was given by hypodermic injection; in some cases only one injection was necessary; more than four injections were rarely required; in no case were injections given oftener than every ten hours. In 21 children in which this method was used, 15 required no narcotic; 3 required only one injection of codeine  $\frac{1}{2}$  gr. In no case was there any evidence of interference with wound healing resulting from the application of cold. There was a definite reduction in the complications attributed to anesthesia and operation, which the author considers to be due to the reduction in the amount of narcotics given. This method is of special value in operations on aged, allergic, or badly injured patients.

#### COMMENT

*In line with the known analgesic properties of cold it is gratifying to note the results in*

*the 185 cases cited. Narcotics are definitely responsible for a number of unpleasant post-operative symptoms that remain in the patient's memory and frequently deter him from seeking surgical aid in future cases.*

*Temple Fay in his observations on the use of local cold in cases of inoperable cancer stressed the relief of pain and the early and complete healing of wounds and ulcers.*

M. C. L. McG.

### *Physiotherapy in General Practice*

W. A. TROUP (*British Journal of Physical Medicine*, 6:144, Sept.-Oct. 1943) refers to three methods of physical therapy that he has found of special value in general practice. The first is the use of infra-red irradiation in the treatment of mumps; a portable infra-red apparatus, preferably of the black body type, can be installed in the patient's bedroom, and treatment given to the parotid glands and surrounding area, half an hour to each side twice daily. This may be combined with local ultraviolet irradiation (a first degree erythema dose to each side) and ultraviolet irradiation of the spine. The infra-red radiation is, however, the most important for relieving pain and swelling. The second method noted is the ultraviolet treatment of herpes zoster; each "crop" of the vesicles is given a third degree erythema treatment; six or eight treatments are sufficient. This treatment causes profuse desquamation; but results in rapid healing of the lesions, and, in the author's experience, entirely prevents the post-herpetic neuralgia. The third method employed is physical therapy of nasal sinusitis, which includes local treatment of the nasal mucous membrane by special quartz applicators attached to the Kromayer lamp; focal infra-red (black body) radiation or ultra short wave therapy; and general ultraviolet irradiation.

## COMMENT

Physical measures have a large field in general practice as adjuvants to medication or as therapeutic agents per se. In addition to the infrared radiation, short wave diathermy has had an excellent effect on troublesome cases of parotitis. In the hospital, in postoperative parotitis, if treated in the first 24, 48 or sometimes 72 hours, Roentgen irradiation has been the treatment of choice. However, in late cases, it is not so dramatically successful and, in these, short wave diathermy has been of value, given once or twice daily, from 12-15 minutes in moderate dosage.

In cases of herpes zoster seen early, diathermy, long or short wave, through the spine, will frequently relieve the pain in a shorter time than any other method. Ultraviolet radiation, in addition to healing the lesions rapidly, leaves but a faint scar. Though early treatment is most to be desired, even after several weeks the subsequent neuralgia frequently has been prevented or greatly relieved.

Gentle heat by radiant or luminous light which is more penetrating than infrared radiation and small dosage of ultra-violet radiation, local and general, help in early cases

of sinusitis. Local ultraviolet, water-cooled, with special applicators, has been used to advantage. Care must be taken to protect the eyes from any light test a severe conjunctivitis result or, from too long or too frequent sessions, cataract may be the eventual hazard. Dark glasses should be used or other protection such as moistened cotton over closed lids. Short wave diathermy in small dosage is one of the most excellent procedures. Gentle heat by any measure is pain relieving and healing; excess heat causes too great congestion and pain and defeats the purpose of therapy. The method, not the machine, may be at fault in case of failure. General ultraviolet radiation, or local by the air cooled generator, stimulates the skin cells and calls the body defenses

into action; here too the tonic dose, the small dose, is preferable, frequently repeated.

M. C. L. McG.

## Physical Therapy Applied at Home for Arthritis

J. V. TREUSCH and F. H. KRUSEN  
(*Archives of Internal Medicine*, 72:231, Aug. 1943) report the use of physical therapy at home for patients with arthritis who had been under treatment at the Mayo Clinic. The methods employed were simple and "adapted to the most meager facilities," but they were carefully prescribed for each individual patient, and patients instructed in their use. These methods included application of heat, cold and contrast baths, massage and manipulation, and exercise, especially general postural training. A follow-up study of 218 patients for whom home physical therapy had been prescribed showed that 92.7 per cent had carried out the treatment and that 64.7 per cent continued it for over three months. Approximately 4 out of 5 patients reported that they were benefited by the use of the home physical therapy, and 2 out of 5 were "definitely enthusiastic" about the results. Patients with rheumatoid arthritis showed more enthusiasm about the results obtained than those with osteoarthritis; but an analysis of results shows but little difference in the two groups. In both groups it was found that patients who received more than one "instructional treatment" were more likely to carry out the therapy at home with a greater degree of improvement.

## EDITORIAL SPONSORS

MALFORD W. THEWLIS.....	Medicine
Wakefield, R. I.	
THOMAS M. BRENNAN.....	Surgery
Brooklyn, N. Y.	
OLIVER L. STRINGFIELD.....	Pediatrics
Stamford, Conn.	
VICTOR COX PEDERSEN.....	Urology
New York, N. Y.	
HARVEY B. MATTHEWS	
Brooklyn, N. Y.	Obstetrics-
	Gynecology
L. CHESTER MCHENRY	
Nose and Throat-Otology	
Oklahoma City, Oklahoma.	
MADGE C. L. MCGUINNESS	
	Physical Therapy
New York, N. Y.	
RALPH I. LLOYD.....	Ophthalmology
Brooklyn, N. Y.	
HAROLD R. MERWARTH.....	Neurology
Brooklyn, N. Y.	
EARLE G. BROWN.....	Public Health,
including Industrial Medicine	
and Social Hygiene	
Mineola, N. Y.	

continued it for over three months. Approximately 4 out of 5 patients reported that they were benefited by the use of the home physical therapy, and 2 out of 5 were "definitely enthusiastic" about the results. Patients with rheumatoid arthritis showed more enthusiasm about the results obtained than those with osteoarthritis; but an analysis of results shows but little difference in the two groups. In both groups it was found that patients who received more than one "instructional treatment" were more likely to carry out the therapy at home with a greater degree of improvement.

## COMMENT

*The results speak well for the high type of patient here discussed, evidently intelligent and understanding—more so than in the usual run of patients most of us meet.*

*If a patient can be induced to regularly carry out a home treatment, simple in outline, laid out for his particular needs, he goes a long way towards helping himself and shortening convalescence. Supervision by his own physician or a physical therapy physician or technician is very much to be desired. In proportion as he has been impressed with what must be done to hasten recovery in so trying a disease as arthritis, he will be anxious to continue his "homework". The authors are to be congratulated on the results of their endeavors.*

M. C. L. McG.

## Physical Therapy of Peripheral Vascular Disease

H. WARSHAWSKY and M. W. DEMPSEY (*Archives of Physical Therapy*, 24: 487, Aug. 1943) discuss the various methods employed by them in the treatment of peripheral vascular disease. The suction and pressure method has been most frequently employed, with especially good results in frostbite, arterial thrombosis and "fairly recent" arterial embolism; in certain cases of arteriosclerosis obliterans and thrombo-angiitis obliterans, the suction and pressure method has given definite subjective relief and resulted in the healing of ulcers. In most cases the variation in pressure employed ranged from 80 mm. suction (negative pressure) to 20 mm. positive pressure; treatments varied from one hour to eight hours in length; and were carried out in a room maintained at a temperature of 85° F. Intermittent venous occlusion has been less frequently used, but when it was employed subjective relief of pain was obtained in a larger percentage of cases than with any other mechanical device; indolent ulcers have healed and gangrene of toes or digits has been demarcated. The most satisfactory time interval for this method has been found to be 1½ minutes of pressure alternating with 1½ minutes of rest. The oscillating bed has been employed in some cases of arteriosclerosis obliterans and thrombo-angiitis obliterans; the average duration of treatment is three hours; 50 per cent of patients have reported subjective relief after treatment, but this de-

vice has not been employed as the only method of treatment in any case. Of methods of hydrotherapy employed, the warm whirlpool bath has proved most valuable, applied to the affected extremities for a period of twenty minutes at each treatment. If gangrene, ulcer, or evidence of inflammation is present, bed-rest is enforced "within reasonable limits." Patients with no open lesions are allowed to be active according to "their vascular capacity," but exercise to the point of inducing ischemia is not permitted. Patients who are confined to bed are given massage and instructed in limited exercises to avoid muscular atrophy. In some cases electrophoresis with mecholyl chloride (1:200 concentration) has given subjective relief. In most cases more than one method has been employed in a regular course of treatment carefully adapted to each patient. With such a schedule of treatment definite improvement has been obtained in from 50 to 100 per cent of cases of peripheral vascular disease of various types, including 75.9 per cent of cases of thrombo-angiitis obliterans and over 80 per cent of cases of arteriosclerosis obliterans.

## COMMENT

*Of the various methods mentioned by the authors, when available, the oscillating bed, on 4 to 24 hour service, with the thermostatically controlled heat cradle, is the simplest and most satisfactory. Especially in the old, who will rarely move unless compelled to, the constant changing of circulation and of position is most beneficial, preventing, among other conditions, hypostatic congestion of the lungs and stasis in all tissues which may lead to phlebitis, thrombosis or embolism. The cradle with its controlled heat set at 92° (forehead temperature) relieves and controls pain and prevents too frequent narcotic dosage. The intermittent venous occlusion is simpler, less apt to get out of order and less trying to the patient than the suction and pressure method, in our hands. Prolonged treatments for hours, daily or continuously, have given best results. Too tight cuffs and too high pressure must be avoided, especially in the old, and a close watch must be kept on the ailing member. All these measures must be used in conjunction with controlled diet, alcohol, abstention from tobacco, attention to affected or infected members as to cleanliness, hygiene, etc. Papaverine is the best narcotic, other opium derivatives being contraindicated as increasing spasm.*

M. C. L. McG.



# PUBLIC HEALTH, INDUSTRIAL MEDICINE AND SOCIAL HYGIENE

## *A Field Study of Alum-Precipitated Combined Pertussis Vaccine and Diphtheria Toxoid for Active Immunization*

P. L. KENDRICK (*American Journal of Hygiene*, 38:193, Sept. 1943) reports a study of the results of immunization of 1,326 children of preschool age (under five years) with combined diphtheria toxoid and pertussis vaccine, alum-precipitated, in comparison with a control group of 1,511 children of the same age group, living in a similar environment, but not given immunizing injections. The schedule of dosage was 1 ml. of plain pertussis vaccine at the first injection; after an interval of one week, an injection of 1 ml. combined diphtheria-pertussis antigen; after an interval of four weeks, another injection of 1 ml. of the combined antigen. The dosage of diphtheria toxoid was the same as that recommended by the Michigan Department of Health for diphtheria toxoid; the dosage of pertussis vaccine was comparable with that employed by the author in a previous study of this vaccine alone. The reactions to the injection of combined vaccine were not serious, and did not "discourage use of the product." The diphtheria antitoxin titers following immunization were as good as those obtained with diphtheria toxoid alone; opsonocytaphagic tests and tests for agglutinins and complement-fixing bodies indicated "response" to the pertussis vaccine. A follow-up study of the incidence of pertussis based on the person-years of observation showed only 0.9 attacks of the disease per 100 person-years in the vaccinated children, as compared with 10.4 attacks per 100 person-years in the control group. The attacks that occurred in vaccinated children were also milder, as a rule, than in the controls. The author concludes that the use of combined antigen gives satisfactory protection against both diseases, and simplifies the immunization procedure by reducing the number of injections required.

### COMMENT

*The figures seem sufficiently in favor to warrant further use of the combined product.*

*This method when adopted should stimulate protective treatments for these two diseases.*  
E. T. B.

## *Use of Modern Laboratory Aids in the Investigation of a Typhoid Fever Outbreak*

E. R. SCHLESINGER (*American Journal of Public Health*, 33:1257, Oct. 1943) reports a study of a typhoid fever outbreak in a rural district in New York State in which 27 cases occurred. The investigation showed that 23 of these were due to ingestion of curd or fresh cheese at a local cheese factory or were secondary to such cases. The other 4 cases were found to be due to contact with chronic carriers. The author points out that the use of more recently developed laboratory procedures was a valuable aid in this outbreak. Bacteriophage typing showed that the cheese and curd contamination was due to typhoid organisms of type C; thus the cases due to this source of infection were distinguished from the type A cases, which were traced to two type A carriers. Two typhoid carriers were found among the farmers supplying milk to the cheese factory; one of these was found to harbor type C organisms, indicating that he was the source of the infection; the other farmer was therefore eliminated as the source of the outbreak although "epidemiological evidence" alone indicated that he was probably the responsible carrier. The use of "Vi" antibody studies facilitated the exclusion of food handlers in the restaurant and cheese factory as typhoid carriers. Since milk deliveries to the cheese factory from the farms of the two typhoid carriers were stopped, no further cases of typhoid have been traced to this factory for eleven months.

### COMMENT

*Reviewing this outbreak and investigation brings to mind an outbreak of typhoid fever in a small city a number of years ago where epidemiological study revealed four distinct sources of infection for some 17 cases. These did not include the public water supply although first impressions suggested water. If*

laboratory service of the type described had been available, many days would have been saved in determining the several foci of infection.

Bacteriophage typing, an important diagnostic aid, if available should be the first laboratory study requested by the epidemiologist conducting the investigation. In this way, in addition to a saving in days used for the investigation, further cases will be prevented.

E. G. B.

### *The Extent of the Syphilis Problem at The Beginning of World War I*

R. A. VONDERLEHR and L. J. USILTON (*New York State Journal of Medicine*, 43:1825, Oct. 1, 1943) present a statistical study of the prevalence of syphilis in the United States. This study shows that from 1936 to 1941, there was "a significant drop" in the "chance of acquiring syphilis." Studies of the incidence of syphilis in selectees under the Selective Service Act, as compared with a calculated rate, based on statistical studies in 1936-1937 and 1939-1941, showed that in most groups the actual incidence as determined by examination and serological tests was less than the calculated incidence; this "differential" increased in the higher age groups; this is accounted for in part by the fact that the older age groups contain more individuals in whom syphilis cannot be detected by the serologic tests. Changes in the rate of prevalence of syphilis since 1941 are not known; "fragmentary data" indicate that there may have been some increase in the civilian rate of attack. The authors are of the opinion that the attack rate of syphilis as calculated by the U. S. Public Health Service in 1936-1937 may well serve as a base line by which to measure the effectiveness of syphilis control.

#### COMMENT

Apparently the syphilis problem was decreasing at a rate faster than anticipated from figures of the United States Public Health Service in 1936-1937. These trends have, of course, been upset by the war-time situation. The 1936-1937 base still can be used to measure the effect of the war upon syphilis incidence.

E. G. B.

### *Protection of Radium Dial Painters*

G. E. MORRIS and associates in the Massachusetts Division of Occupational Hygiene (*Journal of Industrial Hygiene*, 25:270, Sept. 1943) outline the best methods for the protection of radium dial workers. The absorption of radioactive substances through the skin has not been proved; but finger contamination may lead to ingestion; inhalation of radium dust has been shown, however, to be the most common means by which radium is absorbed by luminous dial painters. Special attention is to be paid to small equipment in the radium dial painting booth. The solvent bottles used should be wide-mouthed and not over an inch in height; the blotters should be fixed in place, out of reach of the hand; the cardboard to which the dial is attached should have a glazed surface; the brush should not be dried on a surface that may be subsequently touched by the fingers; paper bag containers should be used for waste disposal. Workers who mix the paint wear respirators, and these respirators should be periodically examined for any deposit of radium dust. A satisfactory, non-toxic solvent for cleaning the hands has been devised, which contains trichlorethylene, 25 per cent, xylene, 28 per cent, and ethyl alcohol, 50 per cent. This solvent may also be used for cleansing respirators and for cleaning the workroom. Radium dial plants should be examined periodically; the preliminary examination should be made in the dark; to detect the finer dust, probably more important from the viewpoint of the workers' health, light bulbs emitting ultraviolet light should be used; the dust "activated" by the ultraviolet radiation can be seen clearly when the light is again turned off. Ultraviolet light should be used in a similar way for the inspection of respirators, clothing and other equipment.

#### COMMENT

This is a very useful summary of procedures by which radium poisoning may be minimized wherever this peculiar problem exists. The point that skin absorption has not been established is important in focusing attention on other channels of intake.

E. G. B.

## OPHTHALMOLOGY

### *Glaucoma and the General Practitioner*

R. I. LLOYD (*New Orleans Medical and Surgical Journal*, 96:67, Aug. 1943) states that next to cataract, glaucoma is the most common cause of loss of vision in adults. As the ability to read is not affected until late in the disease, patients often do not seek relief until the eyes are seriously damaged. If the disease is detected in the earlier stages, the result of treatment may be very satisfactory. The most important factor in glaucoma is increase in intra-ocular pressure due to defective drainage of the eye, due to changes in the minutest capillaries. This abnormal internal pressure causes progressive loss of vision. This effect is not evenly distributed over the visual field so that there are characteristic paracentral defects before direct vision suffers. The characteristic symptoms of glaucoma are, in addition to the increased intraocular pressure, cupping of the optic discs, paramacular field losses and sluggish pupils. The pupil may be small, as adults over forty-five tend to have small and rigid pupils. The tension is determined by the tonometer; ophthalmoscopic examination shows any cupping of the optic discs; and defects in the visual fields are found by white test objects of  $\frac{1}{4}^{\circ}$  moving against an illuminated flat surface. If glaucoma can be diagnosed when increased pressure is intermittent, the cupping of the discs slight, and visual field losses not much more than enlarged spots with contracted fields, further loss of vision may be prevented by treatment. Pilocarpine and eserine are used in conservative treatment, because they pull the periphery of the iris away from the angle of the anterior chamber, thus freeing the drainage spaces. These drugs may be effective in controlling the intraocular pressure for years, but they finally lose their efficacy and the corneo-scleral trephine is indicated. Dilatation of the pupil acts unfavorably on glaucoma, and atropine should be used with caution in older persons. Emotional disturbances should be avoided. Coffee is considered by many to act unfavorably on intra-ocular pressure; syphilis, thyroid dysfunction and diabetes also

have unfavorable effects. High blood pressure does not necessarily produce increased intra-ocular pressure. The general practitioner can be of definite aid in securing the early diagnosis of glaucoma by being "glaucoma conscious," using the Snellen test charts in his office and by referring patients with suspicious symptoms to a specialist. Particularly, he should advise his older patients to consult ophthalmologists for eye examinations. Eye examinations of adults should not be regarded merely as an effort to find what glass the patient may need for reading and near work, but they should be thorough, with an idea of detecting the earliest stages of glaucoma, the early signs of cataract and the first changes in the retinal vessels and tissues so often found in hypertension and kidney disease.

### *Application of Wetting Agents In Ophthalmology*

J. G. BELLOWES and MARTIN GUTMAN (*Archives of Ophthalmology*, 30: 352, Sept. 1943) report studies on the effect of wetting agents on corneal permeability, especially for the sulfonamides; young adult rabbits were used as the experimental animals. It was found such wetting agents as aerosol OS, aerosol OT, tergitol 4, 7, and 08, ocnol KD, sodium lauryl sulfate and zephiran had no harmful effects on the eye when used in the concentrations recommended. In minimal concentrations (0.25 to 1 per cent) aerosol OS, aerosol OT and the tergitols produced an increased penetration of the sulfonamides. With sulfanilamide, which penetrates the cornea more readily than the other sulfonamides, this increased penetration is not of great practical significance. The effect was most marked with sulfathiazole, the concentration of which in the aqueous humor reached levels above that considered necessary for therapeutic effectiveness. Local and general heat also affects the corneal penetration of the sulfonamides. Because in infections of the anterior segment of the eye, adjacent tissues are also frequently involved, the oral administration of the sulfonamides is also indicated in addition to local application with a wetting agent.

### ***Vitamin E (Wheat Germ Oil) in the Treatment of Interstitial Keratitis***

SIMON STONE (*Archives of Ophthalmology*, 30:467, Oct. 1943) reports the use of vitamin E in the treatment of interstitial keratitis that had not cleared up under adequate antisyphilitic (arseno-bismuth) therapy. Vitamin E was first given in the form of a mixture of wheat germ oil with vitamin B complex in doses of 8 to 12 cc. daily. Later the wheat germ oil concentrate tocopherol was employed, in capsules of mixed tocopherols (50 mg. each); one or two capsules were given daily with one or two vitamin B complex capsules. In some patients the vitamin treatment was continued for twelve to eighteen months. The 10 patients treated received no further antisyphilitic therapy because previous treatment had been adequate; 4 had also been given artificial fever therapy prior to the vitamin therapy, because of central nervous system involvement; this did not affect the course of the keratitis. Two patients were given artificial fever therapy shortly after the vitamin E therapy was begun. In all these cases vitamin E was effective in bringing about the absorption of superficial and deep corneal exudates, and in cases of long standing, clearing up extensive corneal opacities and scars. The vitamin B complex was given primarily for its synergistic action with vitamin E, but it is probable that its riboflavin content was a factor in relieving photophobia and capillary congestion. In one case of long standing with reduction of vision to light perception in one eye and to perception of fingers in the other eye, there was complete clearing of the cornea after eighteen

months of vitamin E therapy; while in another case of relatively short duration, absorption of corneal exudates and return of normal vision resulted from four weeks of vitamin E therapy. The author concludes that vitamin E combined with vitamin B complex is a valuable adjunct in the treatment of interstitial keratitis; if adequate antisyphilitic therapy has been given, further specific therapy does not appear to be necessary.

### ***Changes in Optic Function and Ophthalmoscopic Picture in Four Patients of the Eunuchoid Skeletal Type Treated With an Orchic Extract***

MARTIN KUTSCHER (*Archives of Internal Medicine*, 72:461, Oct. 1943) reports that in 4 cases of the eunuchoid skeletal type (2 with eunuchoidism, with a pituitary tumor in one of these cases) there was decreased visual acuity of varying degree and diminished amplitude of accommodation; the visual fields were contracted, especially for colors (red and green). Ophthalmoscopic examination showed changes varying from hyperemia and postneuritic signs to decoloration of the optic nerve heads. Under treatment with an orchic extract given by injection, all patients showed general subjective improvement. There was also definite improvement in visual acuity (for distance) and in accommodation; the visual fields became more nearly normal and the pathologic changes in the eyegrounds disappeared. The author notes that some improvement has been brought about in 3 other cases of different types by the same treatment, in a period of two to four months, including a case of retinitis pigmentosa.

## **NEUROLOGY**

### ***Syndrome of Involvement of the Posterior Cord of the Brachial Plexus***

R. N. DeJONG (*Archives of Neurology and Psychiatry*, 49:860, June 1943) notes that two syndromes resulting from injury to the brachial plexus are well recognized—the upper arm type, or Erb's paralysis, and the lower arm type, or

Dejerine-Klumpke syndrome—as well as total brachial palsy. The syndromes produced by injury to the secondary divisions or cords of the brachial plexus are, however, less clearly defined. The author reports a case in which a man, in attempting to break a fall, struck his left shoulder against a pole, causing an anterior dislocation of the shoulder. Wrist drop was

noted immediately; although the shoulder was replaced, paralysis of the extensor muscles of the wrist and hand persisted, and paralysis of extension of the shoulder developed. Examination of this patient two weeks after the injury showed "complete involvement" of the axillary nerve with paralysis of the deltoid, teres minor and major, subscapularis and latissimus dorsi muscles, resulting in loss of abduction, extension and rotation at the shoulder and of forward and backward movement of the arm. There was also evidence of complete paralysis of the radial nerve with resulting wrist drop and paralysis of extension of the elbow, hand and wrist and of the thumb muscles, and loss of supination. The deltoid muscle showed the greatest degree of atrophy; Horner's syndrome was absent, but there was some swelling, cyanosis and increased perspiration of the hand. Sensory changes were minimal, but this is characteristic of brachial plexus lesions. The syndrome observed in this case did not correspond to either the upper arm or the lower arm type of lesion of the brachial plexus; but could be produced by involvement of those muscles supplied by the posterior cord of the brachial plexus; and must be considered as due to injury of this cord.

### **Spinal Necrosis and Softening Of Obscure Origin**

D. JAFFE and W. FREEMAN (*Archives of Neurology and Psychiatry*, 49:683, May 1943) report 4 cases of necrosis or softening of the spinal cord of obscure origin and review cases of similar type reported in literature. The onset of symptoms in these cases may be acute with flaccid paralysis and complete sensory loss; ascent of sensory and motor impairment may occur, but occasionally the level is stationary. The course of the disease is progressive and it is invariably fatal. In the subacute or chronic type the onset is more gradual and in many cases weakness of the lower extremities is accompanied by increased tonus and hyperactive or normal reflexes, with later development of flaccidity, atrophy and loss of reflexes; there may be ascent of sensory and motor impairment and complete sensory dissociation. Autopsy shows that the destructive process involves both the white and the gray matter; vascular hyperplasia is characteristic; evidences of inflamma-

tion are usually absent, although occasionally lymphocytic infiltration is present. From study of their own cases and those reported in the literature, the authors come to the conclusion that toxic and infectious processes are more important in the production of the lesions of this syndrome than purely degenerative processes. This is suggested especially by the fact that the destructive process is most severe in the areas of maximal vascular hyperplasia.

### **Treatment of Post-Lumbar-Puncture Headache with Ergotamine Tartrate**

S. A. GUTTMAN (*Archives of Neurology and Psychiatry*, 49:556, April 1943) reports the use of ergotamine tartrate in the treatment of headache following lumbar puncture and spinal anesthesia. Of 35 patients treated, 29, or 82.9 per cent, were completely relieved of headache and 2, or 5.7 per cent, partially relieved. Ergotamine tartrate was usually given by deep subcutaneous or intramuscular injection, in some cases by intravenous injection. The usual dosage for deep subcutaneous or intramuscular injection was 0.25 to 0.50 mg. If this gave relief within two hours without causing toxic symptoms, this dosage was usually repeated two or three times a day for two days to prevent recurrence; not more than 1 mg. was given in twenty-four hours. If the headache was relieved, but slight toxic symptoms developed, subsequent doses were reduced by one-half to two-thirds the initial dose. If the headache was not relieved, but there were no toxic symptoms, a 0.25 mg. dose of ergotamine tartrate was given every two to three hours, until the headache was relieved or minor toxic symptoms appeared. If minor toxic symptoms developed without any relief of the headache, the dose was repeated in twelve hours; but if results were the same, the drug was discontinued. The intravenous route of administration was used in 8 cases; with a dose of 0.25 to 0.50 mg. of ergotamine tartrate in physiologic saline solution, relief of the headache was complete or nearly so within half an hour, even when the patient sat up. This method may be used in the treatment of very severe post-lumbar-puncture headache or for those patients who do not respond to ergotamine tartrate given by other routes. From the results obtained in this series



of cases, the author concludes that ergotamine tartrate is of value in relieving post-lumbar-puncture headache in most cases, but the dosage must be determined for each patient as carefully as for rapid digitalization or for the administration of morphine sulfate for acute myocardial infarction.

### ***A Comparative Study of Dilantin Sodium and Phenobarbital in Negro Epileptics***

S. B. McLENDON (*Southern Medical Journal*, 36:303, April 1943) reports a study of the effects of dilantin sodium and phenobarbital on 29 Negro epileptics with seizures of the grand mal type and mental deterioration, under controlled conditions. In a three weeks' period without therapy 253 convulsive attacks occurred in these patients, 3 of whom developed status epilepticus. Dilantin sodium was given to 23 patients in doses of  $1\frac{1}{2}$  grains three times a day, and in doses of 6 grains daily to 6 patients for eight weeks; 63 convulsive attacks occurred in this period, none of the status type; 11 patients had no convulsions. All the patients were "friendly and alert" and required less supervision than when under phenobarbital treatment. Phenobarbital was given in doses of  $1\frac{1}{2}$  grains three times a day for eight weeks to the 29 patients for another eight weeks' period; 78 convulsions occurred in this period, some of the status type; the convulsions were more severe than under dilantin sodium treatment; 13 patients had no convulsions. All patients were "more irritable and lethargic." Five of the patients complained of insomnia while under dilantin therapy; this was relieved by giving  $\frac{1}{2}$  grain of phenobarbital with each dose of dilantin sodium for six weeks; no convulsions occurred in any of these patients in this period; their mental condition continued to be as favorable as under dilantin therapy alone. The author concludes that dilantin sodium alone or in combination with phenobarbital is the drug of choice for the treatment of grand mal epilepsy in Negroes.

### ***A New Pyramidal Sign of Great Frequency***

LANE ALLEN and H. CLECKLEY (*Journal of Nervous and Mental Diseases*,

97:146, Feb. 1943) describe a new pyramidal sign which is positive much more frequently than the Babinski sign. The patient should be in the supine position with the leg entirely relaxed and the foot in slight plantar flexion which is natural when the patient is lying supine. To elicit the sign the second toe is "flicked sharply upward with the finger applied to the ball of the toe." If the sign is positive the big toe (and frequently other toes) will respond by extending (i.e., dorsiflexion) quickly and transiently. The maneuver is somewhat similar to that described by Rossolimo and occasionally elicits the Rossolimo reflex. In 72 cases in which this test was carried out, the reflex was positive in 41, while 20 showed a positive Rossolimo and 7 a positive Babinski. In a study of these signs after a metrazol convulsion in schizophrenics, it was found that the Babinski sign was often positive soon after the seizure when "cortical influences" were minimal; the Rossolimo sign appeared later as cortical influences were restored to some extent; the dorsiflexion response followed or sometimes coincided with the Rossolimo sign and persisted longer, when there was a greater—but still imperfect—restoration of cortical control. From their study of these cases, the authors conclude that the dorsiflexion response elicited by their test is a sign of damage to the pyramidal tract which may be elicited when such damage is minimal; in cases of damage to the pyramidal tract, the Rossolimo sign is more frequently obtainable than the Babinski sign. The latter, they have found, is not always positive in cases with definite evidence of a pyramidal tract lesion; in such cases, however, the dorsiflexion response is present, as well as Rossolimo's sign. The pyramidal sign described does not necessarily indicate an organic lesion of the pyramidal tract, but may indicate "pyramidal dysfunction."

### ***Sequels of Equine Encephalomyelitis***

H. H. NORAN and A. B. BAKER (*Archives of Neurology and Psychiatry*, 49:398, March 1943) report a case in an infant who recovered completely from an acute attack of equine encephalomyelitis, but about two months later began to have convulsive seizures and showed mental retardation. The child died three and a half years after the acute attack; almost con-

—Concluded on page 62



# Medical BOOK NEWS

Edited by

ALFRED E. SHIPLEY, M.D., Dr. P.H.

All books for review and communications concerning Book News should be addressed to the Editor of this department, 1313 Bedford Avenue, Brooklyn, N. Y.

## Sexual Instinct

*Introduction to the Psychoanalytic Theory of the Libido.* By Richard Sterba, M.D. [Nervous and Mental Disease Monographs #68]. New York, Nervous and Mental Disease Monographs, [c. 1942]. 8vo. Cloth, \$2.00.

WITH the growth of psycho-analysis, there has been an attempt by some analysts to ignore the fundamental work of Freud on the theory of instincts. To counteract this tendency, the author has written the book to recapitulate Freud's findings in the domain of instincts, and particularly that of the sexual instinct.

It is a thorough, though concise presentation of the subject, and presents in a very clear manner the basic foundations upon which psycho-analysis has been built. It is a good book that will offer much to the general practitioner of medicine and will prove useful even to the specialist in Neuro-psychiatry.

It is highly recommended because of its clarity, thoroughness, and authenticity.

IRVING J. SANDS

## Special Treatment of Fractures

*Manual of Fractures. Treatment by External Skeletal Fixation.* By C. M. Shaar, M.D. and Frank P. Kreuz, Jr., M.D. Philadelphia, W. B. Saunders Company, [c. 1943]. 300 pages, illustrated. 8vo. Cloth, \$3.00.

SHAAR and Kreuz's "Manual of Fractures" is devoted primarily to the treatment of fractures by means of external skeletal fixation. The use of the Stader splint and its amplification for fractures in the various regions of the body, particularly for long bones and some of the tarsal bones, is given special emphasis.



## Classical Quotations

● It often requires but a small amount of any kind of food to change a harmless circumscribed into a dangerous diffuse peritonitis. . . . The laity should be taught to stop feeding and giving cathartics to patients suffering from intra-abdominal diseases.

ALBERT JOHN OCHSNER

The Cause of Diffuse Peritonitis Complicating Appendicitis and Its Prevention. J.A.M.A. 35:1747-1754 (June 22, 1901).

The authors' experience at the Philadelphia Naval Hospital with the use of external pin fixation is probably the largest hereto reported with the Stader apparatus. While it is generally felt that external pin fixation has a field of usefulness in the treatment of long bones,

the danger of sustained distraction must not be overlooked, regardless of what type of external pin fixation is to be employed. The incidence of delayed and non-union will be increased unless the specific directions as recommended by the authors are adhered to. Although their experience with this form of castless method of treatment has been successful in their hands and the incidence of complications has been limited in their experience, the general impression of other observers has been that the use of a plaster augmenting this form of treatment will be necessary, particularly in fractures of the shaft of the tibia.

The book, however, is an excellent treatise on this form of treatment by two men with tremendous experience, whose advice and judgment is invaluable for those who may be prompted to employ this form of treatment.

IRWIN E. SIRIS

## Syphilology

*A Synopsis of Clinical Syphilis.* By James Kirby Howles, M.D. St. Louis, C. V. Mosby Company, [c. 1943]. 671 pages, illustrated. 12mo. Cloth, \$6.00.

THIS author has produced a really excellent small book on Syphilis. Calling

it a Synopsis does not do it justice, because there is more detail than one would expect in a synopsis.

There are three sections in the book, the first dealing with General Considerations of Syphilis, in which are found history, bacteriology, pathology, clinical manifestations, laboratory diagnosis and therapy. Section two deals with Systemic and Regional Syphilis, with separate chapters on the involvement of each individual system, e.g., osseous, cardiovascular, eye, ear, etc. The third section is on the Familial and Public Health Aspects of Syphilis.

One notes in the early chapters of sectional a summary at the end of each which completely points up the discussion in that chapter.

The text is well written and well illustrated for a small book. The methods of examination and treatment are fundamentally sound. The book is comprehensive enough for any physician to use in his daily work, and is readily recommended.

E. ALMORE GAUVAIN

#### *Work of the Army Medical Corps*

*Victories of Army Medicine. Scientific Accomplishments of the Medical Department of the United States Army.* By Edgar Erskine Hume, Col., M.C., U.S.A. Philadelphia, J. B. Lippincott Company, [c. 1943]. 250 pages, illustrated. 8vo. Cloth, \$3.00.

The part played in American medical history by the officers of the Medical Corps is the more thoroughly appreciated after scanning Hume's work. Their contributions are outstanding and of value in many fields. In sanitation, hospital design, gastric physiology, typhoid prophylaxis, yellow fever control, alcoholism, photomicrography, hookworm anemia, malarial fever control, the Munson last, typhus fever prophylaxis, aviation medicine: in all of these army experience and experimentation have been of inestimable help in the clarification of medical problems.

Names mean more when in proper context, as in this volume, and Beaumont, Reed, Russell, Gorgas, Billings, Ashford, Sternberg, and Craig become intimate acquaintances.

The book, with its compilations, photographs, and sketches, will be of interest to any one familiar with American medicine.

FRANK BETHEL CROSS

#### *Conybeare's Latest Edition*

*Textbook of Medicine.* By various authors. Edited by J. J. Conybeare, D. M. Oxon. Sixth Edition. Baltimore, The Williams & Wilkins Company, [c. 1942]. 1147 pages. 8vo.

**T**HIS is the sixth edition of a textbook that must have a generous following to deserve that many editions since the first one in 1929. The material has been contributed by eighteen collaborators. This number is in contrast to an American text which has one hundred forty four. The advantage in numbers lies with the text under review.

As the preface to this edition states "The original object of the Editor was to provide within a reasonable compass and at a moderate price a book which, without becoming a synopsis, would contain the essentials of Medicine." One must not therefore compare it too closely with the average textbook of medicine which avowedly does not place such restrictions upon itself. It occupies an intermediary place between a synopsis or compendium and the full sized textbook. And yet the incompleteness of its treatment of many subjects cannot be excused. The American student would not be content; he has other texts nearer home which have a greater appeal.

The volume contains valuable material, but as compared with the average American textbook most subjects are inadequately treated. The few exceptions are illustrated by the chapter on Diabetes Mellitus which is amply and interestingly covered.

It would profit the author and greatly increase the value and popularity of the book if it is brought more up to date and the important subjects given more space, even if the sixty pages devoted to Diseases of the Skin were entirely omitted.

S. R. BLATTEIS

#### *The Mind of Man*

*Mind, Medicine, & Man.* By Gregory Zilboorg, M.D. New York, Harcourt, Brace & Company, [c. 1943]. 344 pages. 8vo. Cloth, \$3.50.

**D**URING this war, as in the first World War, there has been increasing interest on the part of lay people in matters that are generally designated as "mental." Consequently, several works dealing with the subject, have recently been published. This book is written by

one who possesses, besides technical knowledge, a facile pen, and is also an eminent linguist.

It is written in a discursive manner and will appeal to intelligent people who are interested in human behavior and its abnormalities.

IRVING J. SANDS

### *The Internal Ear*

*The Inner Ear.* By Joseph Fischer, M.D. & Louis E. Wolfson, M.D. New York, Grune & Stratton, Inc., [c. 1943]. 421 pages, illustrated. 8vo. Cloth, \$5.75.

**T**HIS is a comprehensive work combining a study of the labyrinth from the standpoint both of the otologist and the neurologist. The chapter on applied physiology deals exhaustively with spontaneous and induced reactions, and the chapter on functional tests is most complete, not only in describing the enormous number of tests in great detail, but in showing what each test indicates. A short chapter is devoted to oto-sclerosis, the study of which has been recently stimulated by the successful surgical treatment of it. Considerable space is devoted to the problems of war trauma, as well as to those of aviation. It is a complete work, and although devoted to a narrow field, it explains the many problems of the internal ear with great clearness and should be read with advantage by every otologist and neuro-surgeon.

ROBERT L. MOORHEAD

### *Military Surgery*

*Neurosurgery and Thoracic Surgery.* [Military Surgical Manuals Vol. VII]. Prepared and Edited by the Subcommittees on Neurosurgery and Thoracic Surgery of the Committee on Surgery of the Division of Medical Sciences of the National Research Council. Philadelphia, W. B. Saunders Company, [c. 1943]. 310 pages, illustrated. 8vo. Cloth, \$2.50.

**T**HIS volume is one of a series developed under the auspices of the Division of Medical Sciences of the National Research Council to furnish medical departments of the United States Army and Navy with compact presentations of necessary information in the field of military surgery. The individual manuals are prepared under the auspices of the various subcommittees of the Committee on Surgery of the Division of Medical Sciences of the National Research Council and are edited by the Committee on Information.

The purpose of this manual is to supply to those who already have had at least some experience in civil neurosurgery cer-

tain particulars regarding established methods of treatment in this special field of military surgery. The chairman of the subcommittee on neurosurgery is Dr. Howard C. Naffziger.

Eighty of the 300 pages of the book are devoted to Thoracic Surgery, prepared and edited by the Subcommittee on Thoracic Surgery, of which subcommittee, Dr. Evarts A. Graham, is chairman. The subject matter of this manual has been rigorously limited to the special problems offered by wounds and injuries of the thorax. The general principles of military surgery and similar matters that are common to all injuries must be looked for elsewhere. With the limitations described, these manuals are a valuable contribution to a reasonable uniformity in the treatment of the various conditions under consideration.

JOSEPH RAPHAEL

### *New Edition of McLester*

*Nutrition and Diet in Health and Disease.* By James S. McLester, M.D. 4th Edition. Thoroughly Revised. Philadelphia, W. B. Saunders Company, [c. 1943]. 849 pages. 8vo. Cloth, \$8.00.

**T**HIS edition of a standard work shows a number of changes covering recent advances, especially regarding the vitamins, mineral elements, and enrichment of foods. Cholin, biotin and pantothenic acid are described. Storage and processing of foods, new material on deficiency diseases, and nutrition in industry receive added attention. The general plan is the excellent one of previous editions.

W. E. MCCOLLOM

### *Graphic Obstetrics*

*Atlas of Obstetric Technic.* By Paul Titus, M.D. St. Louis, C. V. Mosby Company, [c. 1943]. 180 pages, illustrated. 8vo. Cloth, \$7.00.

**A** PICTURE book of obstetric technic. A few gynecological conditions are included, with blank pages for notes. In such a simple book differences of opinion may or may not be important. Non-absorbable sutures for closure of peritoneum and aponeurosis are not mentioned. Tension sutures and intravenous use of pituitrin are recommended. Titus advises against prophylactic version for breech presentation. The word "peritonealization" is often used instead of "peritonization." The medical student may like this book.

CHARLES A. GORDON

**BOOKS RECEIVED** *for review are promptly acknowledged in this column; we assume no other obligation in return for the courtesy of those sending us the same. In most cases, review notes will be promptly published shortly after acknowledgment of receipt has been made in this column.*

**Orthopedic Nursing.** By Robert V. Funsten, M.D. and Carmelita Calderwood, R.N., A.B. St. Louis, C. V. Mosby Co., [c. 1943]. 602 pages, illustrated. 8vo. Cloth, \$3.75.

**Memoir of Walter Reed. The Yellow Fever Episode.** By Albert E. Truby, Brigadier General, U.S.A., Retired. New York, Paul B. Hoeber, Inc., [c. 1943]. 239 pages, illustrated. 12mo. Cloth, \$3.50.

**Textbook of Medicine.** Edited by Russell L. Cecil, M.D. Associate Editor for Diseases of the Nervous System, Foster Kennedy, M.D. 6th Edition. Philadelphia, W. B. Saunders Co., [c. 1943]. 1565 pages, illustrated. 4to. Cloth, \$9.50.

**The Substance of Mental Health.** By George H. Preston, M.D. New York, Farrar & Rinehart, Inc., [c. 1943]. 147 pages. 12mo. Cloth, \$1.75.

**Biochemistry for Medical Students.** By William Veale Thorpe. 3rd Edition. Baltimore, Williams & Wilkins Co., [c. 1943]. 476 pages, illustrated. 8vo. Cloth, \$4.50.

**Biochemistry of the Fatty Acids and Their Compounds, the Lipids.** By W. R. Bloor. [American Chemical Society Monograph Series.] New York, Reinhold Publishing Co. [c. 1943]. 387 pages, 8vo. Cloth, \$6.00.

**Psychiatry in War.** By Emilio Mira, M.D. New York, W. W. Norton & Co., [c. 1943]. 206 pages, illustrated. 8vo. Cloth, \$2.75.

**An Introduction to Foods and Nutrition.** By Henry C. Sherman and Caroline Sherman Lanford. New York, Macmillan Co., [c. 1943]. 292 pages. 8vo. Cloth, \$2.00.

**Diseases of the Eye.** By Sir John Herbert Parsons, M.D. 10th Edition. New York, Macmillan Co., [c. 1942]. 726 pages, illustrated. 8vo. Cloth, \$6.50.

**The Complete Pediatrician.** By Wilburt C. Davison. 4th Edition. Durham, N. C., Duke University Press, [c. 1943]. 256 pages. 8vo. Cloth, \$3.75.

**Synopsis of Tropical Medicine.** By Sir Philip Manson-Bahr, M.D. Baltimore, Williams & Wilkins Co., [c. 1943]. 224 pages, illustrated. 12mo. Cloth, \$2.50.

**Microscopic Technique in Biology and Medicine.** By E. V. Cowdry. Baltimore, Williams & Wilkins Co., [c. 1943]. 206 pages. 8vo. Cloth, \$4.00.

**Clinical Audiometry.** By C. C. Bunch, Ph.D. St. Louis, C. V. Mosby Co., [c. 1943]. 186 pages, illustrated. 8vo. Cloth, \$4.00.

**Stuttering. Significant Theories and Therapies.** By Eugene F. Hahn. Stanford University, Stanford University Press, [c. 1943]. 177 pages. 8vo. Cloth, \$2.00.

**A Hundred Years of Medicine.** By C. D. Haagensen & Wyndham E. B. Lloyd. New York, Sheridan House, [c. 1943]. 444 pages. 8vo. Cloth, \$3.75.

## CULTURAL MEDICINE

—Concluded from page 46

rights of others, and is inhibited from doing as he pleases by reason of conscience, morality, religion, and ethics. Our recent experience with certain types of mankind seems to indicate an atavistic return to the previous state of barbarism.

**I**N the development of infants and children it has been shown that the newborn

infant is practically barbaric in tendency, desiring everything it sees, and that ethics and morality are only of later development in the evolution of the child to the civilized adult. Thus we see that psychologically every child must go through the same stages as its prehistoric ancestors before it reaches the adult moral stage.

We can thus conclude that the statement "Thou renewest every day the work of creation" is fully justified in the light of modern scientific research.

88 Central Park West.

## CONTEMPORARY PROGRESS

—Concluded from page 58

tinuous opisthotonus and spasticity of all limbs were noted before death. Autopsy showed a destructive process that had produced multiple glia-lined cavities in the frontal lobes and widespread degeneration of the parenchymal elements of the brain;

many blood vessels were occluded either by "endothelial increase" or calcium deposits. A review of the literature indicates that neurologic sequels "of a chronic and progressive nature" may occur after acute equine encephalomyelitis which are apparently due to widespread tissue damage in the central nervous system resulting from extensive vascular damage. This suggests "a vascular spread of the virus."